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A Macro Analysis of British Columbia Youth

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BRITISH COLUMBIA

Ministry of Advanced Education, Training and Technology

Ministry of Advanced Education, Training and Technology

A Macro Analysis of British Columbia Youth

Prepared by:

Youth and Labour Market Services Branch

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SUMMARY AND HIGHLIGHTS

This document provides a scan of BC's learning, labour market and social environment with a particular focus on youth issues. Included is a review of provincial demographics from a youth perspective, participation of youth in the education and training system, current and future labour market performance and prospects, the impact of changes to the social safety net, and health and well being issues.

Its purpose is to provide an array of information to contribute to effective policy and program planning and decision making targeted at youth. These include youth programs of the Ministry of Advanced Education, Training and Technology designed to provide access to affordable education and to meaningful employment in support of the development of a well educated citizenry and a strong knowledge based economy in British Columbia.

Highlights

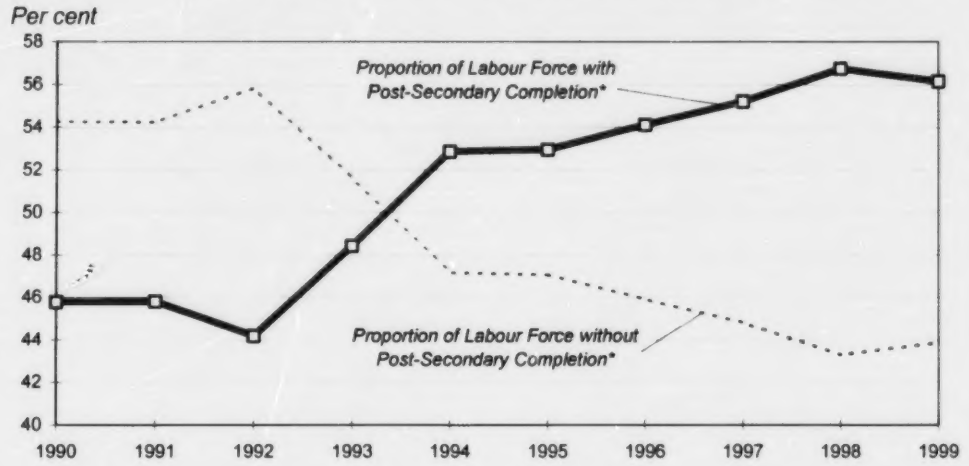
The education and training system affects and is affected by societal, economic, and labour market conditions. The emergence of the information economy has both shaped and significantly increased the demands placed on the education and training system, which has propelled its growth. Evidence of the emergence of the "new economy" includes high employment growth in information technology sub-sectors. Another indicator is the growth in the educational attainment of BC's labour force coupled with improving relative labour market conditions for those with higher levels of education.

The strong interdependence of demographics, the education and training system, labour force activity, and the social safety system makes it difficult to discuss one and not the others. The discussion becomes even more complicated when considering the youth population. Youth are often in transition resulting in their high proportions in the education and training system, labour force, or both. As a direct result of these movements and for other miscellaneous reasons many youth draw on employment insurance (EI), and income assistance (IA) benefits. The existence of and changes to these social safety net systems affect youth participation in both the education and training system and the labour force.

Although it is difficult to track current labour market conditions of youth because of their high mobility between regions, programs, schooling and jobs, much can be said about their future employment and earnings by educational attainment based on historical, current, and projected patterns for adults. Over the 1990s the relative supply of workers with post-

secondary completion grew rapidly but was still out-paced by the growth in their relative demand. Chart A shows that the relative supply of core working age BC workers with post-secondary completion grew from 45.8 to 56.1 per cent of the labour force. In absolute numbers, their supply grew to 865,100 in 1999, a 55 per cent increase from the 558,800 level seen in 1990.

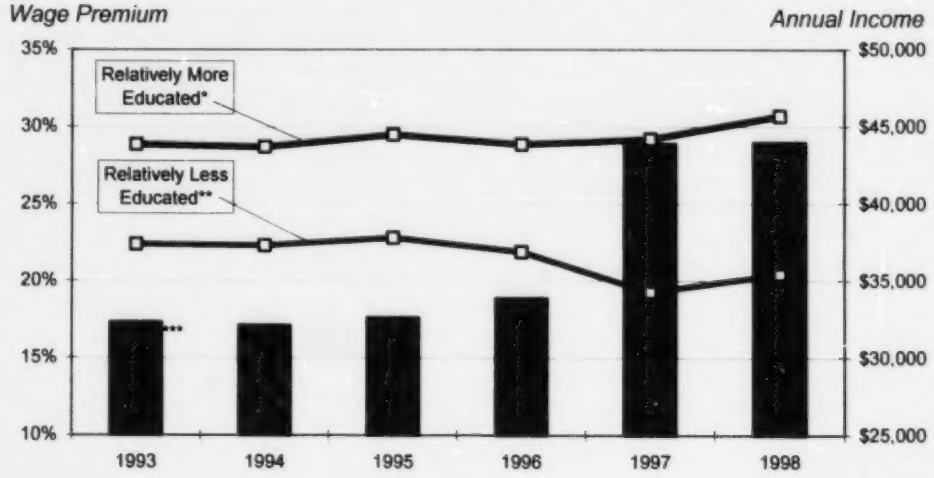
Chart A: The proportion of the labour force, aged 25 to 54, with post-secondary completion* grew from 45.8 to 56.1 per cent over the 1990s.



* Post-Secondary Certificate, Diploma, or University degree
Source: Stats Can., Labour Force Survey

Despite this rapid growth in the supply of workers with higher levels of education, their labour market outcomes have actually improved relative to that of their less educated counterparts. Chart B shows that the wage gap between those with post-secondary completion and those without (expressed as a per cent of wages of those without) grew from 17 per cent in 1993 to 29 per cent in 1998.

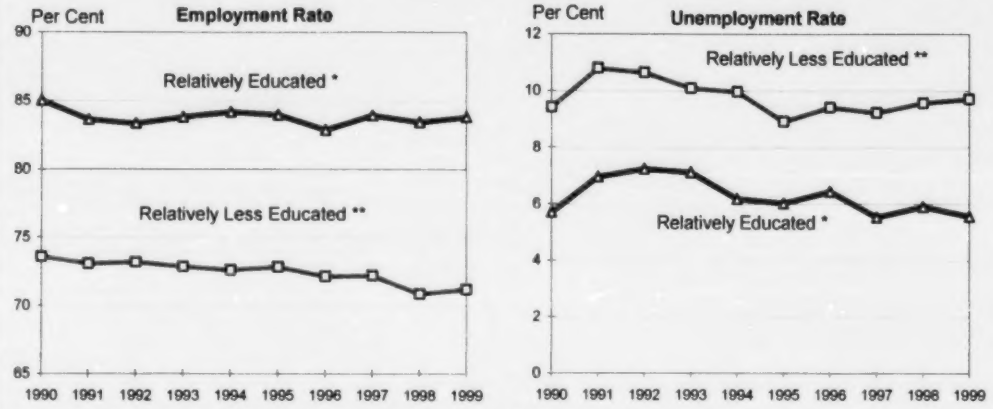
Chart B: Average Full-Time, Full-Year Earnings of the Core Working Age Population Aged 25-54, and Their Wage Premium* For Holding a Post-Secondary Certificate, Diploma or University Degree, 1993 to 1998**



* Persons possessing a Post-Secondary Certificate, Diploma or University degree.
** Persons with some post-secondary education or less.
*** The extent that average wages are higher for those who possess a Post-Secondary Certificate, Diploma or University degree.
Source: Stats Can., Survey of Labour and Income Dynamics

Employment rates and unemployment rates also continue to be superiour for post-secondary completers as seen in Chart C. As with wages, the gap with these labour market indicators between those with and without post-secondary completion has shown no signs of decline.

Chart C: BC Employment Rates and Unemployment Rates for the Relatively Educated* and Relatively Less Educated ** Persons Aged 25 to 54

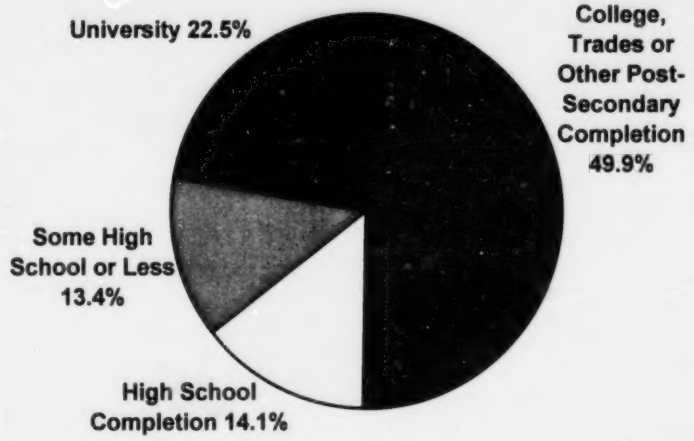


* Persons possessing a Post-Secondary Certificate, Diploma or University Degree.
** Persons with some post-secondary education or less.
Source: Statistics Canada, Labour Force Survey

The fact that relative employment outcomes have not diminished for relatively educated workers strongly suggests that the rapid growth in their supply has been very much demand driven. This adds to the body of evidence that suggests that the emergence of the new economy has been occurring. With this transition comes a growing importance of the education and training system to individual incomes as well as to minimizing income disparities among individuals with varying amounts of education.

Educational requirements of employment projections from the Canadian Occupational Projection System (COPS) suggest that the high growth in demand for post-secondary completers will continue at least through to 2008. Chart D below estimates that 72.4 per cent of the projected job openings are for occupations requiring post-secondary completion. Since, for the most part, the criterion used was "minimum," this illustration could understate the share of workers within particular occupations actually possessing university or other post-secondary training or education in lower skilled occupations. In any case, 72.4 per cent is very high considering that only about 56 per cent of the core working age work force has completed post-secondary education as seen in Chart A above. This adds to the evidence that the rapid growth in the educational attainment of BC's workforce seen in Chart A has been demand driven, suggesting that the emergence of the "new economy" has been occurring.

Chart D: Share of Projected Total BC Employment Openings, by Occupational "Training/Education Requirement," 1998-2008

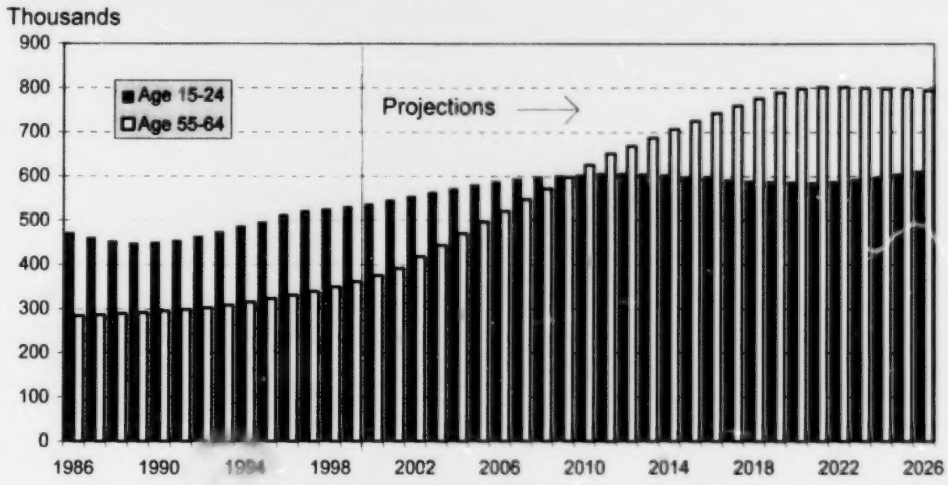

University 22.5%
College, Trades or Other Post-Secondary Completion 49.9%
Some High School or Less 13.4%
High School Completion 14.1%

Source: COPS, MAETT

Failure to meet the demand for qualified workers will have severe negative social and economic consequences. Wage premiums for those with post-secondary completion will continue to grow rapidly as shown in Chart C, increasing the disparity of incomes and strain on social programs from lower income individuals. Wage costs in industries requiring relatively educated workers will rise along with the prices of their outputs and hence many of their inputs. Already high health care costs will increase further due to the rising wages of health professionals. As a direct result of growing wage costs, including pressures for wages of professors and instructors to rise, the PSE system will require a greater degree of government support or will be forced to raise tuition fees or both. Any reduction in access to PSE will further exacerbate the skill shortage problem, which will further increase wage costs creating a cyclical effect. These crippling economic effects from not producing a sufficient supply of educated workers will have a reducing effect on the incomes of both post-secondary completers and non-completers.

The retiring of the baby-boom generation has contributed to BC's economic and social need to increase the supply of relatively educated workers. In fact, most (57 per cent) of the COPS projected openings are to satisfy replacement needs due to attrition. Chart E below shows that the retiree population is growing relative to the youth population. The accelerated retirements that this will inevitably cause will open many job opportunities for today's youth, particularly for those with relatively high levels of education.

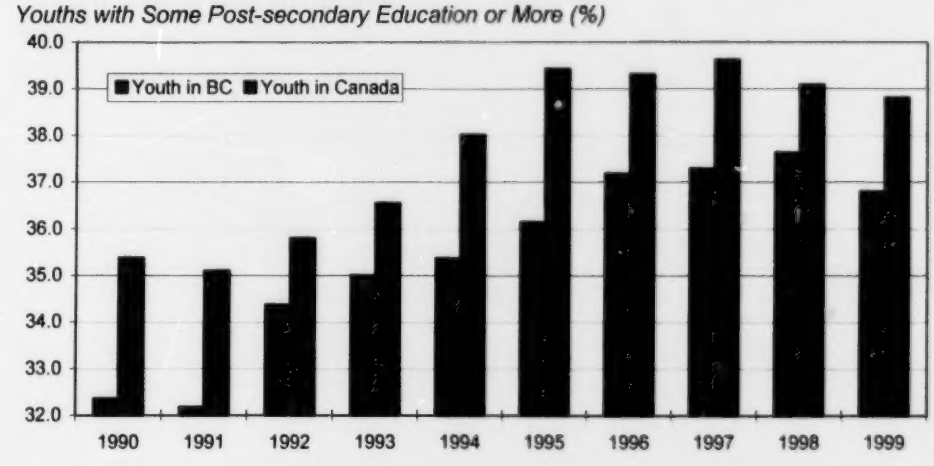
Chart E: The retiree population in BC is quickly overtaking the potential flow into the workforce.



Source: BC Stats, P.E.O.P.L.E. 23

The educational attainment of BC's youth is indicative of both their future labour market success as well as the economic well being of BC. Chart F, however, shows that the educational attainment of youth in BC continues to trail that of Canada for all years over the 1990s. Approximately 39 per cent of youth in Canada had some post-secondary education or more in 1999 compared with 37 per cent in BC.

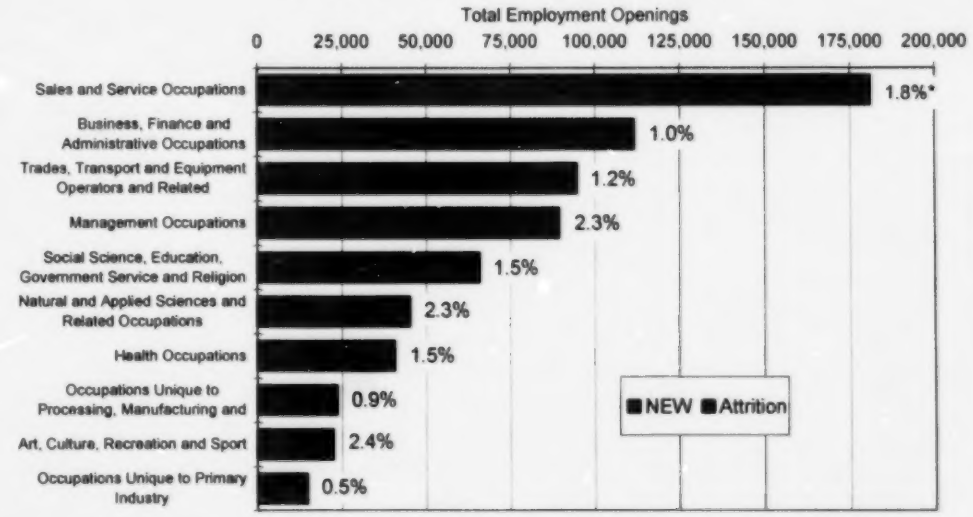
Chart F: A smaller proportion of BC youth have some post-secondary education than for Canada as a whole.



Source: Statistics Canada, Labour Force Survey

Up until now workers have been discussed as though they are homogeneous within educational attainment categories. However, most job openings that require post-secondary completion require that the diploma, certificate, or university degree be in a particular specialty or narrow range of specialties. Responsible government policy requires both ensuring sufficient access to affordable education and also the provision of labour market information to direct youth into high employment growth areas. This suits their individual needs as well as BC's economic needs to meet future labour demands. BC Work Futures (www.workfutures.bc.ca) is a publication that attempts to achieve these goals by providing occupational outlooks for almost 200 BC occupations to assist with career exploration and educational decision making. Chart G below shows the total number of employment openings by occupation type projected to become available between 1998 and 2008.

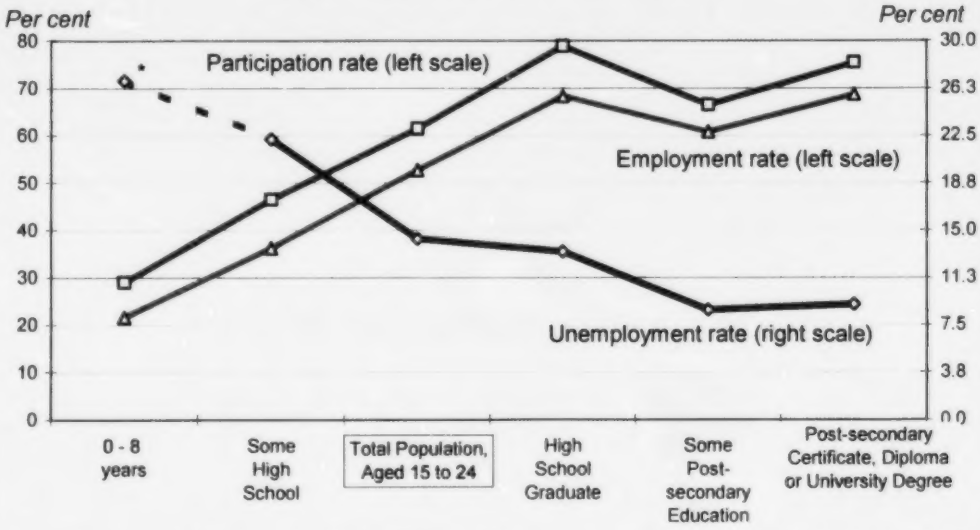
Chart G: Projected Number of New and Retirement Openings by Occupational Type, 1998-2008



*Projected Average Annual Employment Growth
Source: COPS BC Unique Scenario, 1999

The labour market advantages of education are seen even within the youth population. Youth with higher levels of education generally have higher labour force participation rates and employment rates and lower unemployment rates, as shown in Chart H below.

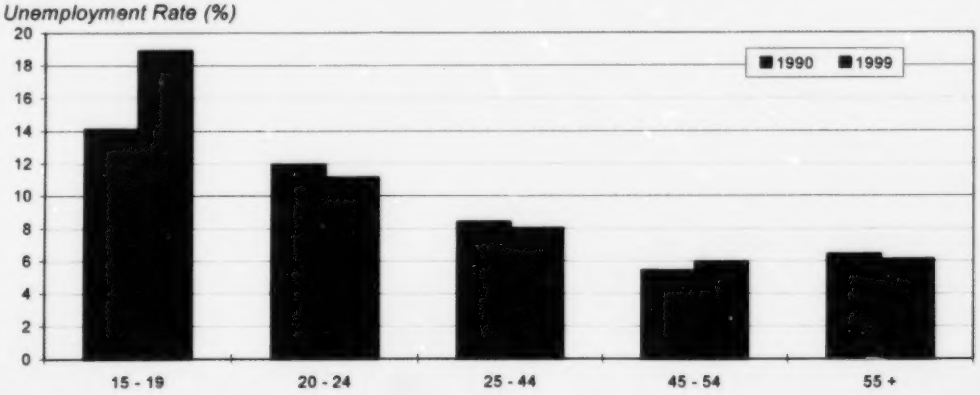
Chart: H: Employment Indicators for Youth (Aged 15 to 24) by Educational Attainment in 1999



* The unemployment rate for youth with 0-8 years of education is unavailable due to a small sample size. For illustration purposes, an average of all available unemployment rate observations in 1990 is used. These years include 1990, 1991, 1992, and 1995.
Source: Statistics Canada, Labour Force Survey

Given the importance of education to labour force performance, it is not surprising that unemployment rates are far higher for the two youth cohorts than all the older ones in BC as seen in Chart I. Their higher unemployment rates also reflect their high tendency to move in and out of the labour force and between jobs. Youth unemployment rates in B.C. continue to remain higher than any province west of Quebec.

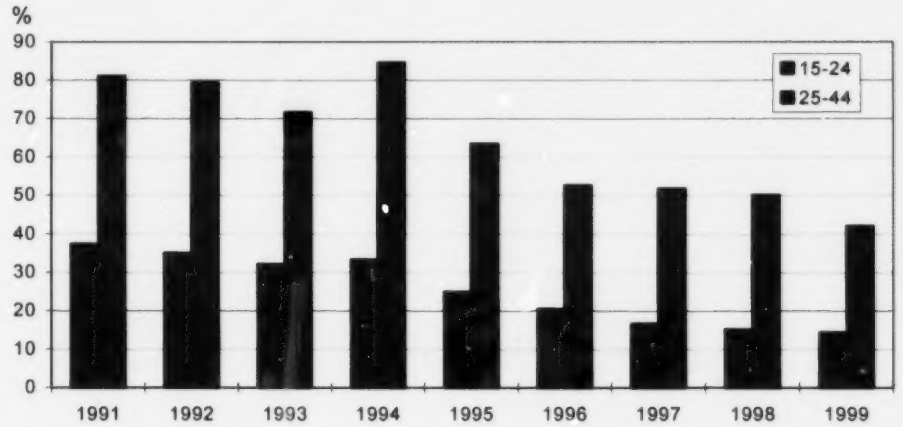
Chart I: 1999 Unemployment Rates by Age Group in BC



Source: Statistics Canada, Labour Force Survey

The Beneficiary to Unemployed ratio (B/U) is a statistic that is effective in showing the relative inaccessibility that unemployed youth have to employment insurance benefits. It is the percentage of the unemployed population that receives EI benefits. Chart J shows that the B/U ratio for adults was twice that for youth throughout the 1990s and was three times greater in 1999. The youth B/U ratio dropped from 37% in 1991 to 14% in 1999 following a major overhaul of unemployment legislation by the federal government in 1996. This relatively low and declining accessibility of youth to EI benefits combined with their relatively high unemployment rates point to the need for alternative forms of support such as programs that facilitate their transition into employment.

Chart J: B/U Ratio (EI Beneficiaries/Unemployed) for Youths and Adults, 1991-1999



Sources: Labour Force Survey (for unemployed) and HRDC (for EI beneficiaries)

During the 1990's BC youth have increased their participation rates in post-secondary education, and for those participating this bodes well for their future employment outcomes. Yet the 1990's saw a deterioration in labour market conditions for youth. Only part of the drop in their employment rates and labour force participation was due to increased youth in schooling. Both non-student and student youth saw a rise in unemployment rates and a fall in their labour force participation.

This scan of the BC labour market with a youth focus has revealed two things:

1) Increasing access to education and training and the provision of labour market information to direct youth into areas of relatively high demand are effective in:

   A) helping youth achieve their personal development and career goals, and
   B) promoting economic efficiency for BC by helping to better ensure a sufficient supply of qualified workers to satisfy the needs of the emerging knowledge based economy.

2) There is an ongoing need for programs to help youth enter employment.

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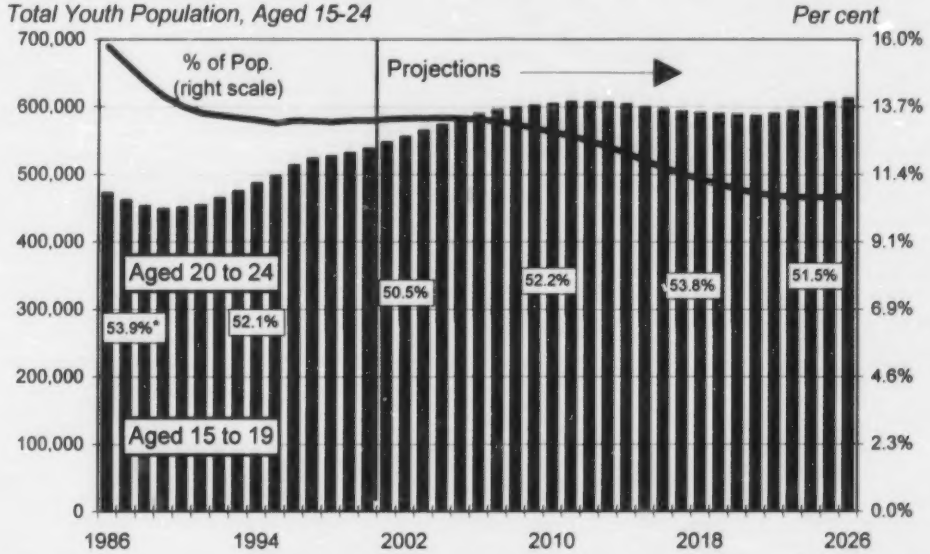
1. Demographics

1.1 Youth population continues to grow while falling as a proportion of total population.

- *Youth population (ages 15 to 24 years) has been falling as a share of total population in BC since the mid 1970's and is projected to continue to do so through to 2024 as seen in Chart 1.1.* Despite this declining proportion of youth, their absolute numbers have increased by 14 per cent since 1986 to a level of 538,708 in the year 2000. This level is projected to rise to 613,533 by the year 2026. While the youth population is growing in BC, it is not growing at all in Canada as a whole. The youth population in Canada is only 94 percent of its 1986 level and is projected to be at about this level in 2026.

Chart 1.1: Historical and Projected Youth Population in BC, 1986 to 2026

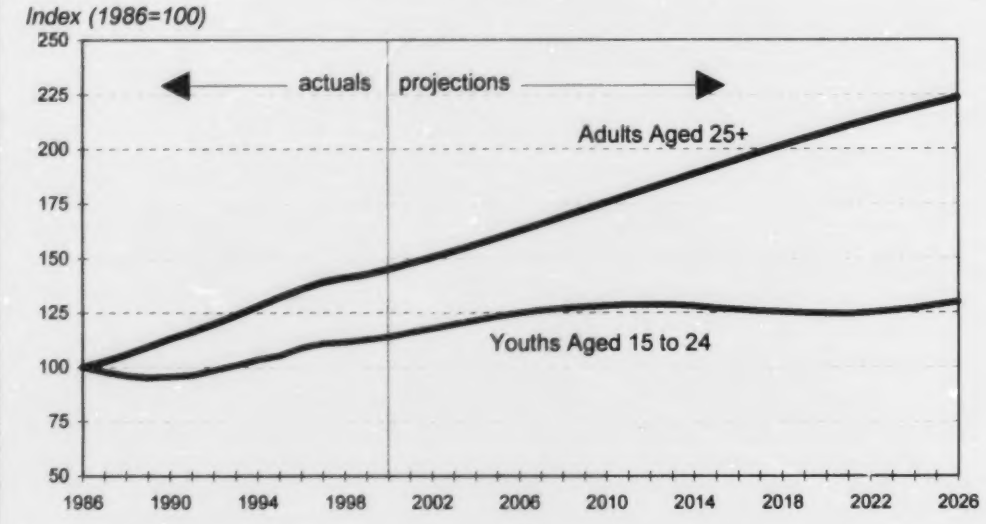


* Per cent of youth population that are in the 20 -24 range for years that are displayed on the x-axis.
Source: BC Stats, P.E.O.P.L.E. 25

- *Population growth has been much smaller for youths than adults though still significant.* The population of persons 25 years and older in BC is projected to be 123 per cent higher than its 1986 level by 2026. By comparison, the youth population will increase by 30 per cent over this period. This has a number of implications. Increased pressures will occur in terms of enrollments in secondary schools in BC, and in terms of post-secondary capacity to absorb this growing number. Another implication will be

increased pressures on the youth labour market with a growing supply in terms of the size of the youth labour force.

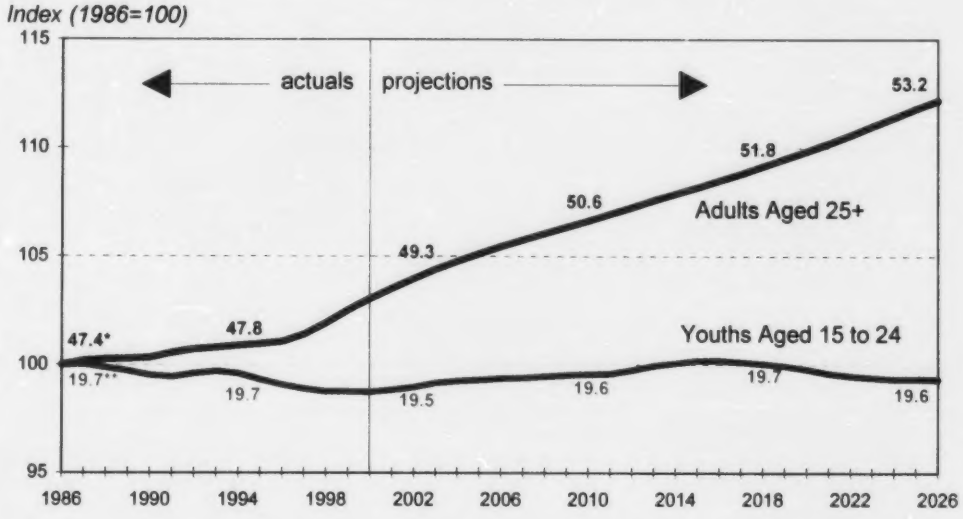
Chart 1.2: Population Growth of Youths (Age 15 to 24) and Adults (Age 25+), 1986 to 2026



Source: BC Stats, P.E.O.P.L.E. 25

- *BC's population has been aging at a considerable rate while the youth population has not aged at all.* This is evident from Chart 1.1 above which shows that the proportion of youths in the older half of the youth age range (age 20 to 24) has actually declined, though very slightly. Chart 1.3 below provides some additional evidence. It shows that the average age of youths is currently at its lowest level (19 and a half years) since 1986 and that it is projected to increase slightly by 2026 but still be less than its 1986 level of 19 years and 9 months. Meanwhile, the average age of persons aged 25 and over is projected to reach 53 by 2026, a 6 year increase from its 1986 level of about 47.

Chart 1.3: Growth in the Average Age of Youths (Age 15 to 24) and Adults (Age 25+), 1986 to 2026



* Average age of adults, aged 25+, for every other year displayed on the x-axis starting with 1986. These estimates have a slight downward bias as all persons in excess of 90 were assumed to be only 90 years old.
** Average age of youth, aged 15 to 24, for every other year displayed on the x-axis starting with 1986.
Source: BC Stats, P.E.O.P.L.E. 25

1.2 The Labour Market Implications of Demographics for Youths in BC

- *The aging of BC's population and its declining proportion of youth will result in favourable labour market conditions for youths in the future.* The impending retirement of the baby boom cohort, which currently comprises about half of BC's labour force, will open up vast numbers of employment opportunities for youths over the next 20 years. Opportunities in professions and trades for youth at that time will be favourable. But in the meantime, the current youth population is faced with difficult challenges in entry into the labour market. Since the proportion of the total population that is youth continues to fall (despite the fact the youth population is growing in absolute numbers), combined with other competing public policy concerns and challenges like health care, this creates a danger that youth may become more disenfranchised.

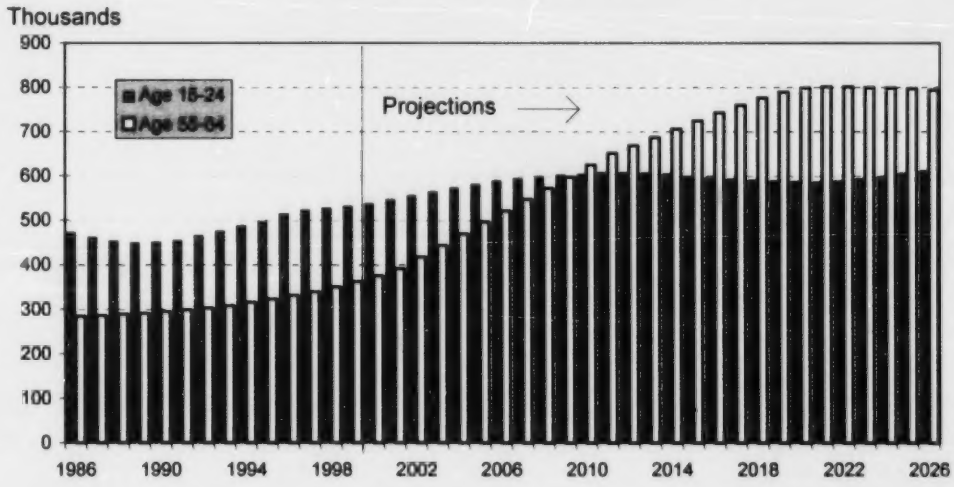
The changing relative size of different age cohorts has a direct impact on the demand and supply for labour. It affects the demand for labour through its effect on the mix of domestic demand for goods and services. The aging trend of the population is projected to increase demand for a variety of areas including financial planning, retirement housing, health care, travel services, and restaurant meals. Growth in the numbers of British

Columbians retiring will also significantly impact the supply of workers, particularly for certain occupations such as those in health, education, and the trades. With the exception of housing, the impact in terms of employment is concentrated upon services. This in part will continue to shape the occupational requirements of employers and hence the composition and number of employment opportunities.

On the supply side of the labour market, demographic change impacts the size and composition of the working age population. These demographic induced changes in the demand and supply of labour affects the skills, training, and education needs and requirements of the labour force.

Chart 1.4 shows the estimated and projected population levels of youths, and those between the ages of 55 and 64 from 1986 through to 2026. The youth cohort corresponds to the potential flow into the labour force, whereas the retiree cohort corresponds to the potential outflow. In 1986 the population of the younger cohort was 67% higher than the retiree population and now only 43% higher. The retiree population is projected to catch up by the year 2009 and exceed the younger cohort by 23% by the year 2026. This means that for many occupations, attrition will not be matched by a replacement in-flow of new workers.

Chart 1.4: The pre-retiree population in BC is quickly overtaking the potential flow into the workforce.



Source: BC Stats, P.E.O.P.L.E. 25

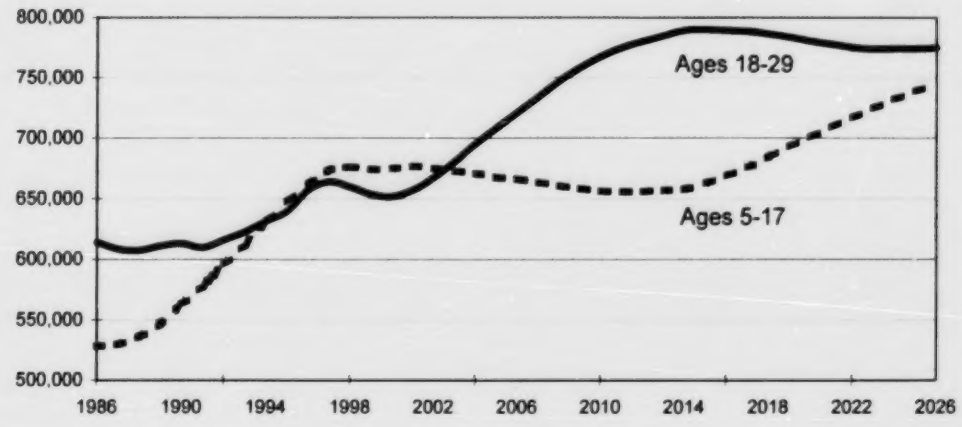
Baby boomers between the ages of 35 and 54 currently make up about half of the BC labour force. Those who are currently aged 45 to 54 constitute almost one quarter of the labour force, but have come up against a hierarchical work structure. Relative to the previous generation, their progression and promotion chances have become congested due to their large numbers. Hierarchically configured businesses have tended to shed middle

management workers and flattened their structures so the emphasis for progression is often lateral. That often leads to changing of occupation which in turn increases the need for retraining. Ongoing education and training are also necessary to keep up with changes in technology and information technology. The preference of employers to invest in the training of younger workers as opposed to workers in the baby boom generation, due to their proximity to retirement, will favour youth career progressions.

1.3 Demographic Implications for the Education and Training System in BC

- *Growth in the youth population will place considerable demands on the education and training system while teachers retire in large numbers over the next twenty years.* Charts 1.5 and 1.6 below look at the changes in the population of persons aged 5 to 17 and 18 -29. These are roughly all K-12 aged persons and post-secondary aged persons respectively. According to projections, the 18-29 age cohort will decline slightly from 2014 to 2026 while the 5-17 age cohort will decline slightly from 2002 to 2014. Other than these declines, populations of both these age cohorts are generally projected to rise. The age 5 to 17 cohort is projected to increase by over 10% between now and the year 2026, while the 18-29 cohort is projected to increase by close to 19%. This will place additional demands upon the education and learning systems in the province by increasing the number of enrollments in K-12 and post-secondary educational institutions. This will come at a time when shortages of teachers are expected due to retirements. The proportion of teachers entering their retirement age is growing just as the general population displayed in Chart 1.4 above.

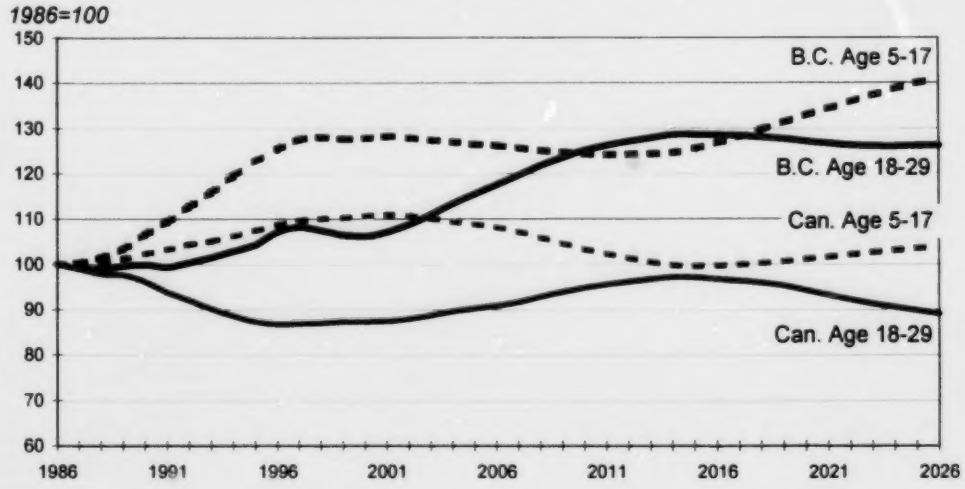
Chart 1.5: BC School Aged Population, Ages 5-17 and 18-29



Source: BC Stats, P.E.O.P.L.E. 25

As seen in Chart 1.6, population of these age cohorts for Canada as a whole has remained relatively stable. From the year 2000 to 2026, population is projected to decrease by 6.2% and increase by 2.0% for the age cohorts of 5-17 and 18-29 respectively. The number of educational spaces required to serve these demographics will have to continue to increase in BC but will likely change little for Canada overall.

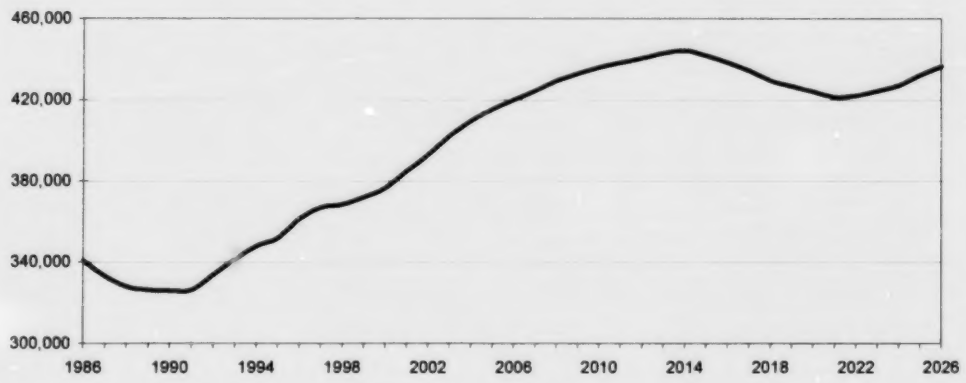
Chart 1.6: BC and Canada School Aged Population, Ages 5-17 and 18-29, 1976-2026, Indexed (1986=100)



Source: BC Stats, P.E.O.P.L.E. 25

Looking at just the prime initial post-secondary population, aged 18 to 24, in Chart 1.7, we see a population growth pattern similar to the 18-29 cohort. This cohort is projected to increase by 67,745 (18%) over the next 14 years, reaching a level of 444,209 in 2014. This growth, coupled with rising post-secondary education participation rates, will increase the demand on the BC post-secondary learning system by 18 to 24 year olds over the next 14 years. Even if participation rates in post-secondary education do not change from the present, demographics alone will create considerable increases in the demand for post-secondary seats.

Chart 1.7: BC Population Ages 18 to 24, 1976-2026



Source: BC Stats, P.E.O.P.L.E. 25

Demographics will also cause additional demands placed upon the post-secondary education system to vary considerably through out the province. Chart 1.8 lists BC's college regions in descending order of their projected growth in the number of post-secondary aged persons from 1998 to 2026. This cohort is projected to grow by over 50% in the Fraser Valley area and decline by almost 23% in the East Kootenay area.

Chart 1.8: Projected Population Growth in BC, Age 18-29 by College Region, 1998-2026

Region Name	1998	2008	2026	Average Annual Growth 1998-2026	Net Change 1998-2026	% Change 1998-2026
Fraser Valley	36,750	47,200	55,150	1.5%	18,400	50.1%
Douglas	86,310	101,970	123,190	1.3%	36,880	42.7%
Malaspina	30,670	41,470	43,490	1.3%	12,820	41.8%
Okanagan	47,040	61,810	66,650	1.3%	19,620	41.7%
Kwantlen	118,120	139,420	150,850	0.9%	32,730	27.7%
Capilano	37,100	43,570	43,180	0.5%	6,080	16.4%
Cariboo	28,890	33,250	33,190	0.5%	4,300	14.9%
Camosun	51,930	52,180	53,350	0.1%	1,420	2.7%
Northern Lights	12,640	12,690	12,880	0.1%	240	1.9%
New Caledonia	28,750	32,040	29,210	0.1%	460	1.6%
Selkirk	11,130	14,320	11,290	0.1%	160	1.5%
North Island	22,910	27,190	22,920	0.0%	10	0.0%
Northwest	15,740	17,080	14,020	-0.4%	-1,720	-10.9%
Vancouver	119,750	109,520	106,200	-0.4%	-13,550	-11.3%
East Kootenay	11,910	13,980	9,210	-0.9%	-2,700	-22.7%
BC Total	659,630	747,690	774,760	0.6%	115,130	17.5%

Source: BC Stats, P.E.O.P.L.E. 25

1.4 The Public Service will have to compete for new workers

- *The impact of baby boom retirements will begin to be felt within the public service within five years.* Because of anticipated retirement of baby-boomers, within five years the Public Service will need to attract youth who are skilled and who are leaders. It will face stiff competition from the private sector which is facing similar issues but has continued to hire youth over the past decade.

The impact of baby boom retirements will continue to impact human resources over the next twenty years. Within 10 years, 60% of all levels of BC's public service management (ML1-ML12) will retire or be in early retirement range. For senior management (ML6-ML12) the percentage rises to 70%.

2. Education and Training: Enrollments, Attainment and Debt Loads of Youth

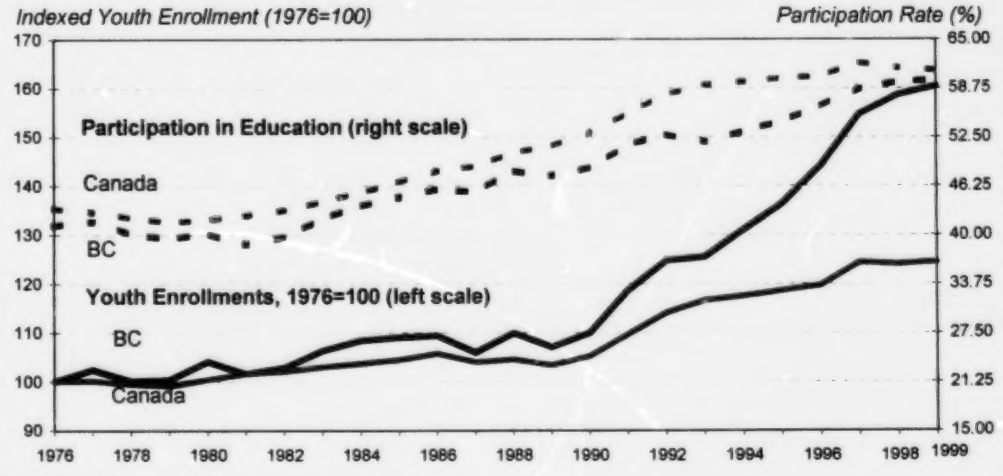
The education and training system affects and is affected by societal, economic, and labour market conditions. The emergence of the information economy has both shaped and significantly increased the demands placed on the education and training system, which has propelled its growth. Evidence of the emergence of the "new economy" includes high employment growth in information technology sub-sectors, but also in increased educational participation rates. This is particularly the case for both youth, and adults who have returned to learning after some time in the labour force. These factors have also meant that the educational attainment in BC for those aged 55 and older is considerably lower than younger adult age groups.

Labour force activity of youth varies greatly according to their educational attainment and participation in the education and training system. Therefore, in order to isolate the effects of educational attainment on their labour force activity, it is useful to only consider youth who are in the labour force. For this reason, unemployment rates or employment as a percentage of the labour force (as opposed to employment rates which are employment as a percentage of population) are useful indicators. In order to look at the labour market outcomes of youth by educational attainment, it is useful to look at labour force variables of young adults. These are people who have just passed the age of 24 (the last year of the youth age range) and most have completed their initial education, and made a full transition into the labour market. These are all topics of the next section, Employment and Earnings. The purpose of this section is merely to outline trends in youth enrollment in the education and training system and their educational attainment and student debt loads.

2.1 Enrollments of Youth in Education and Training

- *Enrollments of youth (aged 15 to 24) in education and training have increased by 60 per cent in BC but only by 25 per cent in Canada as a whole from 1976 to 1999.* This difference is largely a result of differences in demographic trends because participation rates in education and training have followed similar growth paths in both BC and Canada. Over this period, the youth population increased by 10 per cent in BC while declining by 11 per cent in Canada overall. Growth in youth enrollments in education and training has greatly exceeded their population growth because of their increasing education participation rates.

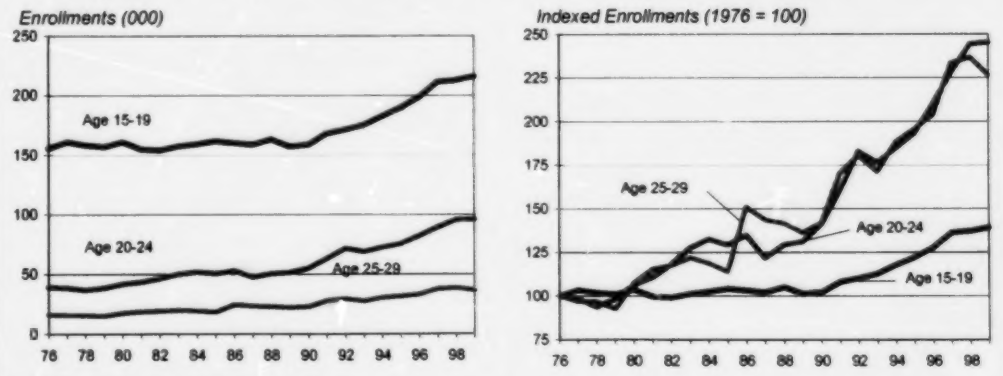
Chart 2.1: Youth enrollments in education and training grew 2.5 times faster in BC than for Canada as a whole.



Source: Statistics Canada, Labour Force Survey

- *BC's total youth enrollment increased by 117,325 to a total of 311,763 from 1976 to 1999.* This increase was split almost equally between younger and older youth (aged 15 to 19 and 20 to 24 respectively) despite the younger ones accounting for 62 percent of all 1999 youth enrollment. The 15 to 19 age cohort accounted for 60.7 thousand (52 per cent) and the 20 to 24 age cohort accounted for 56.7 thousand (48 per cent) of this increase. Younger youth experienced, by far, the slowest growth in their enrollments. Chart 2.2 below shows that, from 1976 to 1999, enrollments grew by only 39 per cent for younger youth (aged 15 to 19) while growing by 145 per cent for older youth (aged 20 to 24) and 127 per cent for young adults.

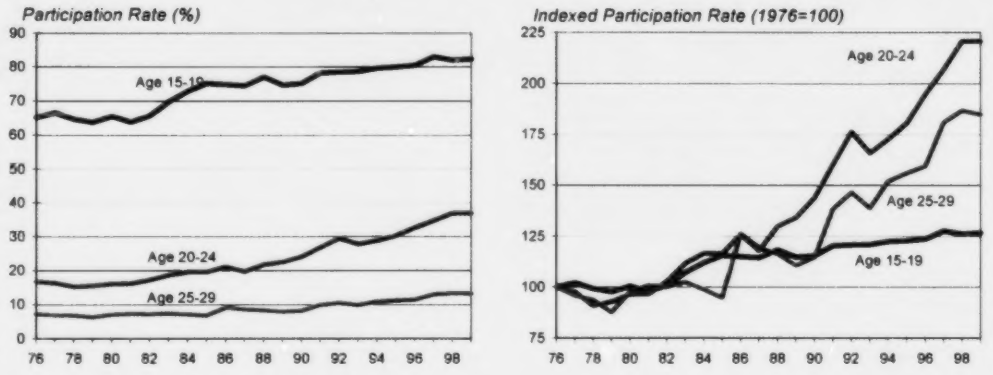
Chart 2.2: Enrollment Levels and Growth of Youth and Young Adults



Source: Statistics Canada, Labour Force Survey

- *The relatively faster growth in the participation rate of older youth relative to younger ones in education and training accounts for their relative growth in enrollments.* The participation rate of older youth in education and training (total enrollments divided by total population) increased by 121 per cent (from17 to 37 per cent) while only growing by 26 per cent (from 65 to 82 per cent) for younger youth from 1976 to 1999.

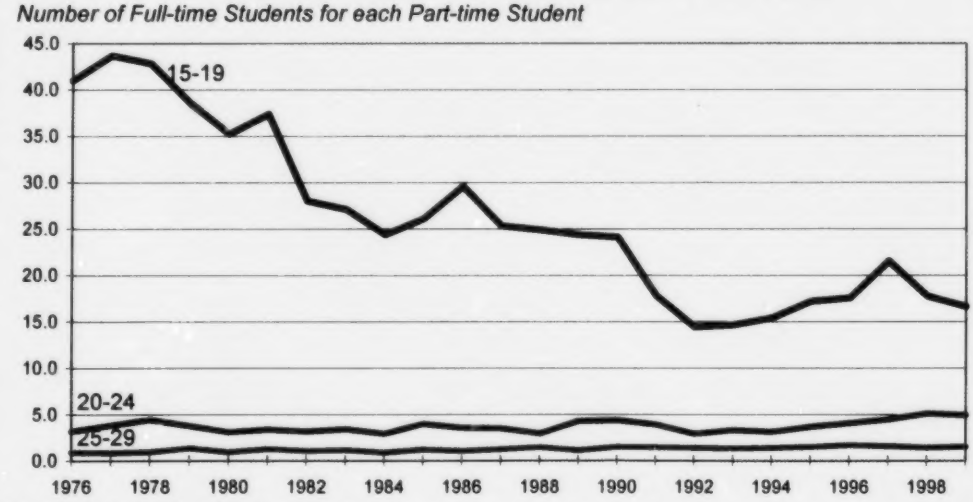
Chart 2.3: Participation Rates in education and training are much higher but slower growing for younger youth.



Source: Statistics Canada, Labour Force Survey

- *By 1999 the full-time to part time student ratio for younger youth declined by 60 percent from its 1976 level but was still 3.4 times higher than that of older youth.* Over this period, the number of full-time students for every part-time student declined from over 40 to under 17 for younger youth, while increasing slightly for older youth and young adults to 5 and 1.5 respectively.

Chart 2.4: The full-time to part-time student ratio has declined dramatically for younger youth while not declining at all for older ones.



Source: Statistics Canada, Labour Force Survey

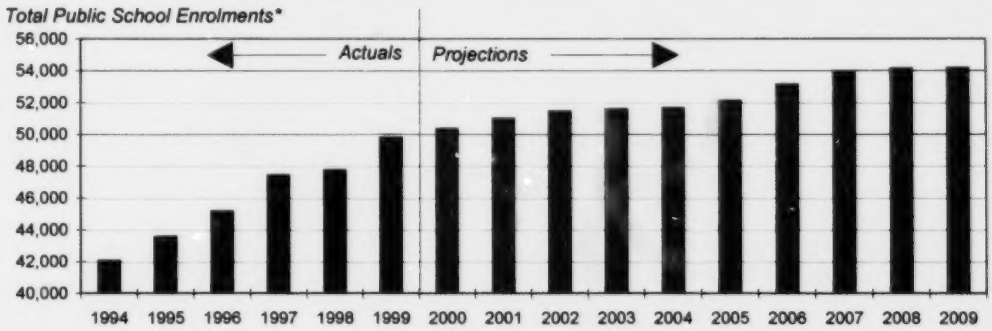
2.2 Enrollments and Participation by Types of Training and Education

2.2.1 Public School Enrollments and Participation

Public education from primary through Grade 12 is offered at over 1,700 public schools across British Columbia. As noted earlier in Section 2, BC is unique among all Canadian provinces in that the school age population is presently larger than ever before and is projected to continue to increase well into the 21st century. Chart 2.5 shows regular grade 12 enrollment levels from 1994 to 2009. The number of regular grade 12 students enrolled in BC public schools increased from 42,085 to 49,853 from 1999 to 1994 and is projected to reach 54,230 by 2009. This increase in Grade 12 graduates means the post-secondary system will need to expand spaces to accommodate this key group of post-secondary entrants.

Growth in the number of K-12 public school enrollments overall however are likely to remain flat this decade and will follow a very similar pattern as the growth in the 5 to 17 aged population as seen in Chart 1.5 in the demographics section.

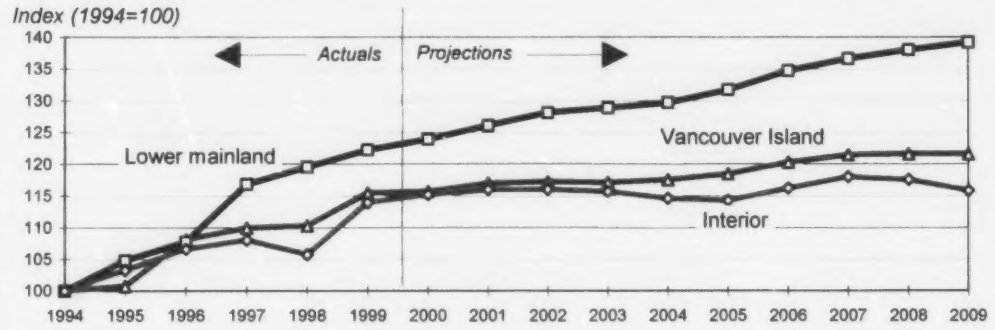
Chart 2.5: Grade 12 Enrollment in BC*, 1994 to 2009



* Includes those in Public Schools, Home School Registrations, PRPs, Youth Custody/Residential Attendance Centres, and Alternate Programs. Francophone Education Authority Schools, Independent Schools and Continuing Education schools are not included.
Source: Ministry of Education

Chart 2.6 below shows the differences in grade 12 enrollment growth between BC's three major regions. Grade 12 enrollment is projected to grow by 39 per cent in the Lower Mainland Region from 1994 to 2009. The comparable growth on Vancouver Island and the Interior is only 22 per cent and 16 per cent respectively. The Lower Mainland accounted for 51 percent of all enrollments in 1994, 53 per cent in 1999, and is projected to reach 55 per cent by 2009.

Chart 2.6: Growth in BC Grade 12 Enrollment* by Region, 1994 to 2009



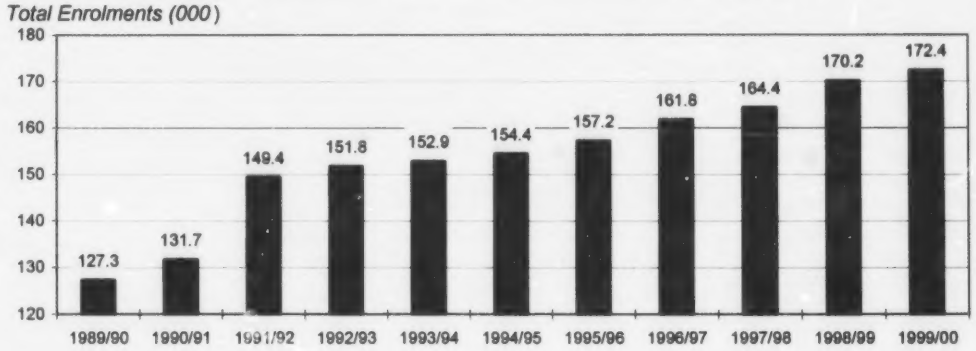
* Includes those in Public Schools, Home School Registrations, PRPs, Youth Custody/Residential Attendance Centres, and Alternate Programs. Francophone Education Authority Schools, Independent Schools and Continuing Education schools are not included.
Source: Ministry of Education

Not surprisingly, the number of British Columbians who graduate from grade 12 annually (including those from private schools) has also been rising. In a 1995 follow-up of school leavers, Statistics Canada found that the high school completion rate had risen to 85 per cent for those aged 22 to 24. Direct transition rates of grade 12 graduates to post-secondary education or training have also been rising. Over 47 percent of grade 12 graduates from the 1993/94 school year immediately entered public post-secondary education or training in the Fall of 1994, up from 41 percent in the Fall of 1990.

2.2.2 Public Post-Secondary Education and Training

Public post-secondary education and training institutions in BC include 11 community colleges, 5 university colleges, 6 universities, 6 institutes and the Open Learning Agency. Non-vocational headcount enrollments (funded by Government) are available on the number of students in universities, university-colleges, colleges and institutes in BC covering 1989/90 to 1999/00. Chart 2.7 shows that student enrollments have increased from 127,300 to 172,400 over this period, an increase of 35.5 per cent.

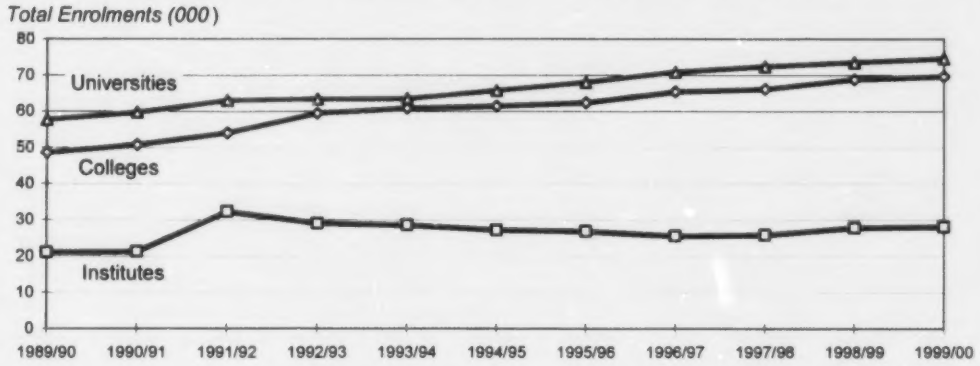
Chart 2.7: Public Post-Secondary Full-time and Part-time Enrollment in Non-Vocational Programs in BC, 1989/90 to 1998/99



Source: MAETT, Post-Secondary Education Division

Enrollments in universities and colleges/university-colleges grew consistently over the 90's, increasing by 29 and 43 per cent respectively. Universities, colleges/university-colleges and institutes accounted for 43, 41, and 16 per cent respectively of all non-vocational, post-secondary enrollments in 1999. Since these headcount data exclude continuing education enrollments, the increase in the number of part-time students attending public post-secondary institutions is actually even greater. For example, it is estimated that in 1993/94, that over 50,000 adult learners registered in non-government funded part-time or short-term educational programs offered through the colleges and institutes. This overall trend in stronger growth of the total number of part-time students serviced by the public post-secondary institutions has required flexibility and responsiveness. For example, two part-time students place considerably more pressure on library, registration and other non-program costs than one full-time student.

Chart 2.8: Full-time and Part-time Enrollment in Non-Vocational Programs by Type of Post-Secondary Institution, 1989/90 to 1998/99



Source: MAETT, Post-Secondary Education Division

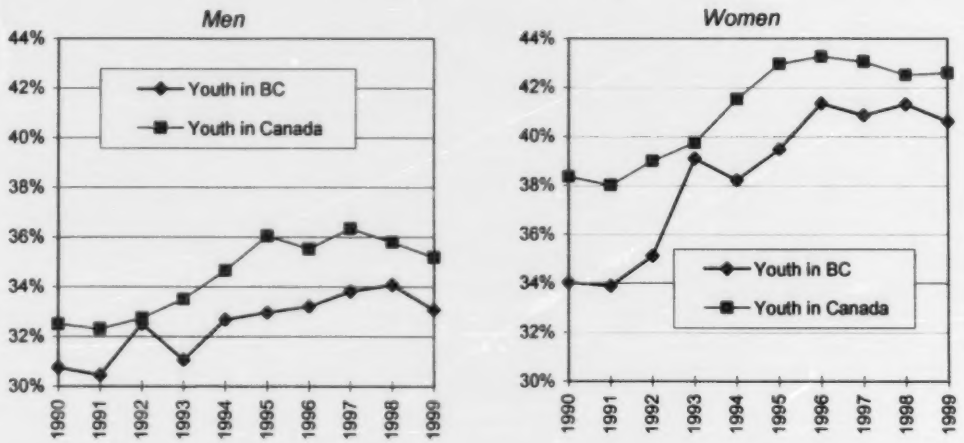
- *Work-oriented high school programs have changed.* There is a decline in some of the more traditional work preparation programs such as pre-employment programs in secondary schools. These have been offset by new developments and new Career Programs available as reported in the 1999-2000 Career Programs data collection report. For example, Technology Education courses are being developed and expanded, and new Career Programs are being introduced. For career programs like Secondary School Apprenticeship, student enrollment has expanded in the trades in more recent years. The Career Technical Centre program concept continues to develop and expand, where secondary students can receive credits and participate in particular public post-secondary certificate and diploma programs as part of completing their high school diploma.

2.3 Educational Attainment of Youth

The historical enrollments of youth in BC's education and training system is not the only factor that determines their educational attainment. The historical nature of youth enrollments and the numbers and average level of educational attainment of youth who migrate to and from BC are also important. The declining number of full-time to part-time enrollments for younger youth has negatively affected the overall youth educational attainment. However, growth in their participation rates in education and training, and a net in-migration of youth who possess a level of educational attainment greater than the BC-youth-average, together, have resulted in substantial growth in the average educational attainment of BC youth.

- *The proportion of youth with some post-secondary education is lower in BC than for Canada as a whole but grew by 14 percent over the 1990s while only growing by 10 per cent for all of Canada.* Both female and male youth in B.C. show a lower proportion with some post-secondary education than for their female and male counterparts respectively in Canada overall. Chart 2.9 shows that the educational attainment for young women aged 15-24 has grown faster than for young men aged 15-24 during the 1990s in both BC and Canada. In part this educational attainment data appears to reflect and confirm concerns that boys are seeing a higher secondary school non-completion rate than girls, that this gap is growing, and boys are less likely to engage in post-secondary studies. Separate data on post-secondary participation rates for 1997 comparing men and women aged 18-24 in B.C. show that women (41%) had a higher post-secondary participation rate than men aged 18-24 (32%).

Chart 2.9: Proportion of BC and Canadian Youth with some post-secondary education, Women and Men, Aged 15-24

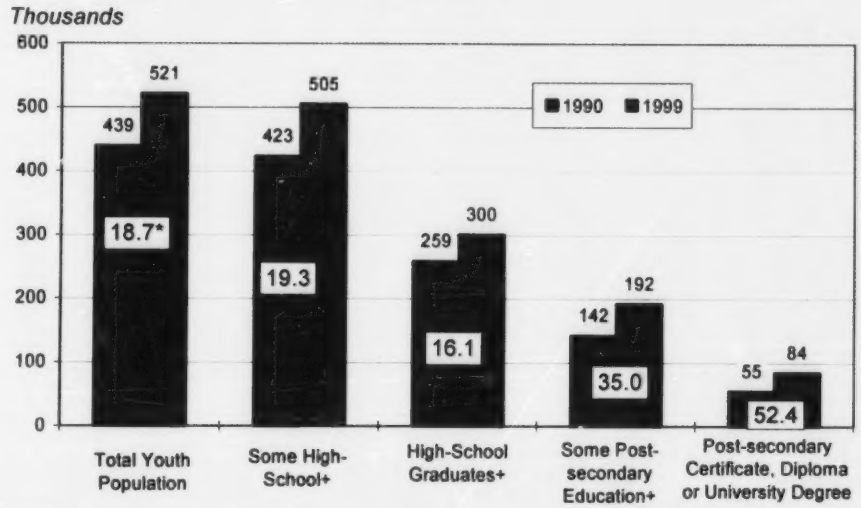


Source: Statistics Canada, Labour Force Survey

Chart 2.10 shows the total youth population and their population in four educational attainment categories. Each category specifies a level of educational attainment and includes all youth that have that level or more. Thus, of the 521,000 youth in 1999, 505,000 had some high-school education or more, and 300,000 of those youth already graduated, etc. With the categories aggregated in this way, it is also easier to see the growth in the overall level of educational attainment. Otherwise, movements of youth from lower to higher educational attainment categories would have a net growth effect of zero. The inclusion of individuals with higher levels of educational attainment in each category ensures that such movements result in positive growth in categories of higher educational attainment with no effect on lower ones.

To this end, the extent to which growth in any of the four educational attainment categories is in excess of the growth of the population of this age cohort reflects an increase in their overall level of educational attainment. The population of youth, aged 15 to 24, grew by 18.7 per cent over the 1990's while those with some post secondary education and more grew by 35 per cent. The number of youth possessing a post-secondary certificate, diploma, or university degree grew by 52.4 per cent. The only educational attainment category that grew less than the population was that of high school graduates at 16 per cent. This implies both of the following: 1) a growing number of students that do graduate pursue higher levels of education and 2) a growing proportion of youth do not graduate and remain in the "some high-school+" category.

Chart 2.10: Numbers of Youth (Aged 15 to 24) by Educational Attainment, 1990 & 1999



* Per cent growth from 1990 to 1999.
+ Includes all individuals with greater levels of education as well. For example, individuals in the "Some High-School+" category include individuals with a university degree. To find the number of individuals with only some high school in 1999, subtract those in the "High-School Graduates+" category from those in the "Some High-School+" category (505,000-300,000= 205,000).
Source: Statistics Canada, Labour Force Survey

In any case, Chart 2.10 shows quite clearly that the educational attainment of youth is on the rise. This Chart should be compared with Chart 3.20 below in the Labour Market Trends Section, which shows that approximately 72.4 per cent of all projected employment openings accruing from 1998 to 2008 are for persons with a post-secondary certificate, diploma, or university degree. This indicates that the rising educational attainment of youth is very much demand driven. Chart 2.26 provides some additional evidence of this. It shows that the wage gap between those with post-secondary completion and those without is on the rise. Those with post-secondary completion earned 29 per cent more than those without in 1998, up from only 17 percent in 1993. This growth in relative demand

adds to the body of evidence that points to the transition of our economy to the "new economy."

Since the average age of youth has declined over the 1990's, though ever so slightly, demographics within the youth population can not help explain their growth in educational attainment. However, since participation rates in education and training have grown significantly more for older youth than younger ones, demographics within the student-youth-population are important to the explanation. The proportion of older youth (20-24) among the student youth population (15-24) increased from 25 to 31 per cent over the 1990s. This has increased the proportion of youth for whom post-secondary education was feasible.

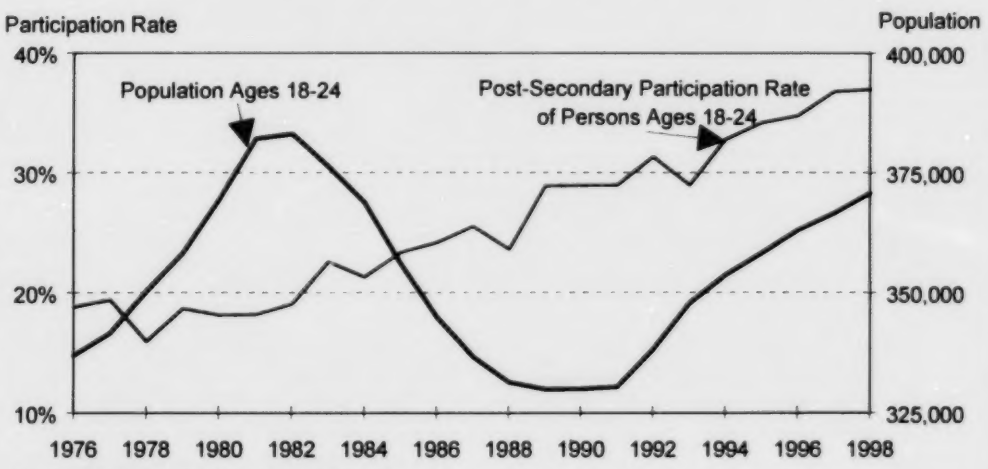
2.4 Strong Post Secondary expansion has not reduced wait lists

- *The number of post secondary students in BC has grown through the 1990s.* There has been growing participation in post secondary education in BC, as a result of increased funding for public post secondary seats, as well as interest and take-up on the part of youth.

- *More youth are attending post secondary education.* The number of students attending post-secondary institutions has grown significantly faster than the growth in the youth population, resulting in increased post secondary participation rates for youth. The post-secondary participation rate (the percentage attending post-secondary educational institutions) for those aged 18 to 24 in BC has risen from 29% in 1990 to 38% in 1998.

- *Participation rates are expected to continue to increase*, although the pace of growth may slow. Greater retention and completion rates for those from secondary school, along with the growing recognition by students and parents about the future labour market advantages of attending post-secondary education or training, have boosted overall post-secondary participation rates.

Chart 2.11: BC Population and Post-Secondary Participation Rate for Persons Aged 18 to 24



Source: BCStats and Labour Force Survey

- *Increased participation rates and demographics will combine to continue to create demand pressures for post-secondary education and training.* Increases in demand for post-secondary education and training is a result of both growth in the number of youth (the prime post-secondary aged population), and their increasing participation rates in education and training. Over most of the past 20 years in BC almost all of the increases in enrollments have stemmed from rising participation rates, as population growth for this age cohort ("the baby-bust generation") has been weak. Yet since 1991, the

population youth aged 18 to 24 has been increasing along with their participation rates in BC.

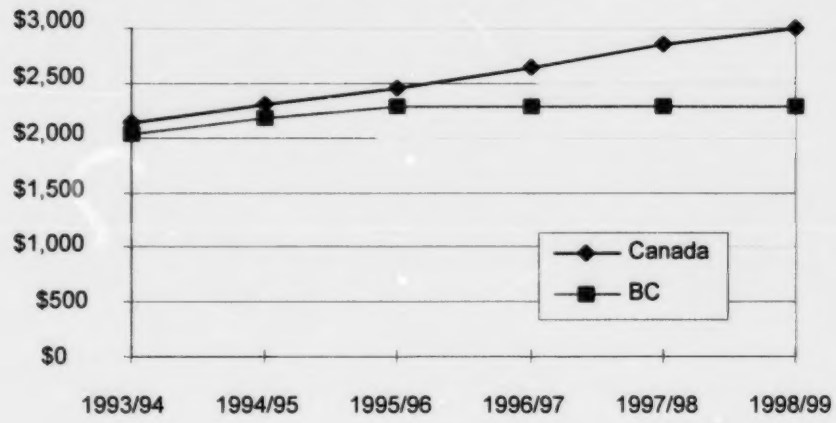
- *Despite increasing numbers of post secondary seats, student demand continues to exceed the available openings.* Universities are continuing to turn away many thousands of qualified applicants every year. UBC reported this fall that they turned away 3,700 qualified applicants. Admission to colleges, university colleges and institutes is based on an open access operated on a first come first served basis. As a result these institutions have had to establish wait-lists for many programs.

- *Unfilled demand for post secondary seats is reflected in increasing academic qualifications required for university admission and growing wait lists at colleges and institutions.* The published minimum GPA for admission to undergraduate programs at the universities is 65%, but due to student demand, the actual GPA cut-offs are generally in the mid to high 70's, and in some cases even higher (at UBC, to enter undergraduate Sciences, a GPA of 82% was required this year). In recent years, these GPA cut-offs have been increasing. As a result, thousands of qualified students apply each year but are not admitted to the universities. Those turned away at one university may be admitted to another, however a recent study by SFU and UBC indicated that about 5,000 qualified individuals, unduplicated, were turned away between the two institutions. At this time there is no way to determine how many of these university turn-aways end up at the colleges or on college waiting lists.

2.5 Student-borne Post Secondary costs continue to increase

- *BC has had a tuition freeze for the past five years.* This has kept tuition costs for post secondary students at 1995 levels. Students enrolled in two semesters of full-time study in an undergraduate Arts and Science program at a BC university in 1998/99 paid an average tuition fee of $2,280. During the same time, the average tuition fee in Canada was $2,990.

Chart 2.12: Tuition Fee Levels, Canada and BC, 1993/94 to 1998/99



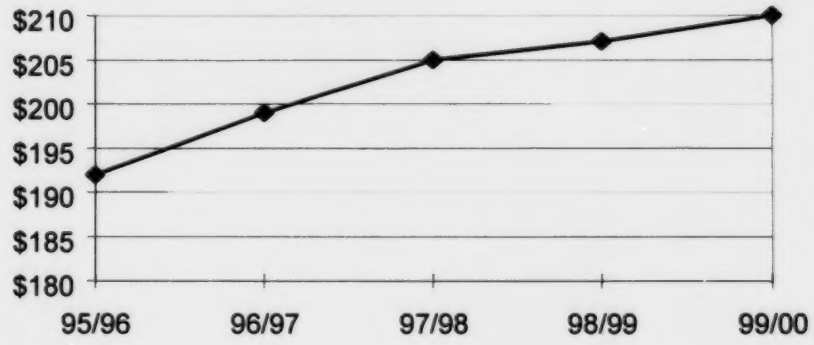
- *Other costs continue to increase for post secondary studies.* Tuition is only one element of the expense associated with post secondary education. Through the 1990s costs have increased for books, the basic living allowance, and transportation. The biggest single expense faced by most students is the cost associated with the basic living allowance.

- *It is increasingly difficult for students to finance their post secondary education through employment earnings.* High unemployment rates faced by students, limited hours of work for those who do find employment, and low wages constrain students' ability to finance their own post secondary education.

2.6 Post Secondary debt loads are growing for new graduates entering the work force

- *Student living allowances used in calculating BC student loans have increased over the 1990s.* The BC Student Assistance Program student living allowance increased by 9.4% over the past five years. This change reflects the increased costs facing students despite the tuition freeze over the past five years.

Chart 2.13: Weekly student living allowance in BC has increased by 9% since 1995.*

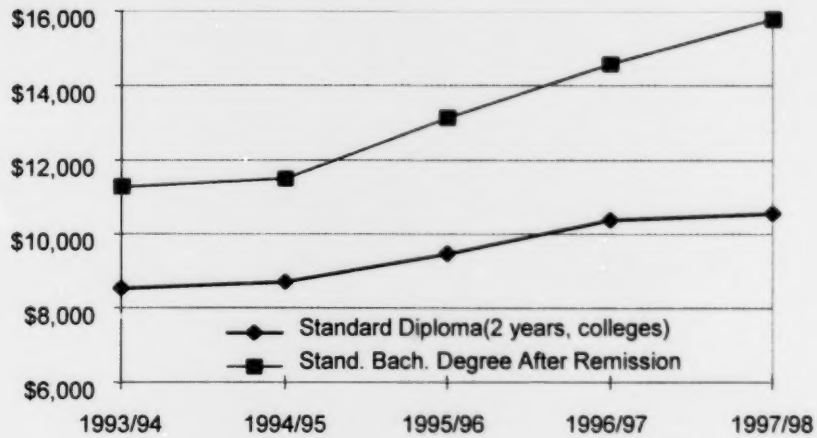


**Single student living away from home*

- *Recent graduates have accumulated more debt in the 1990s.* A typical BC student graduating from a two year program in 1997/98 owed $10,556 on graduating, an increase of 23.7% compared to a similar student graduating in 1993/94. A typical student graduating from a bachelor degree program owed $18,730 on graduating, an increase of 25.7% over the same period. These figures are before any loan remissions, which reduces the debt which must be repayed for students with larger debt loads. For example, after loan remission, a typical student graduating from a bachelor degree program in 1997/98 owed $15,784 on graduating. Also, the BC Student Loan Program was revised in 1999 to extend the non-repayable grant portion to 4 years of post-secondary education, up from 2 years.

- *An increasing debt load for students is not a recent trend.* The *Report of the 1997 National Survey of 1995 Graduates* points out that the average Canadian student graduating in 1995 who had borrowed from a government program, owed 38% more in student loans than the average 1990 graduate and 61% more than the average 1986 graduate. Regarding repayment, 1995 graduates had, on average, repaid about a quarter of their loans two years after graduating, compared to a third and a half respectively for the classes of 1990 and 1986.

Chart 2.14: Student loan debt loads have been increasing.



- *Students have also increased their reliance on other sources of credit.* The amount owed to sources other than student loan plans was also higher for Canadian graduates in 1995. This pushed overall debt levels up even further, while also indicating that the extra borrowing from government programs was due to necessity rather than due to any greater ease of borrowing.

3. Employment and Earnings

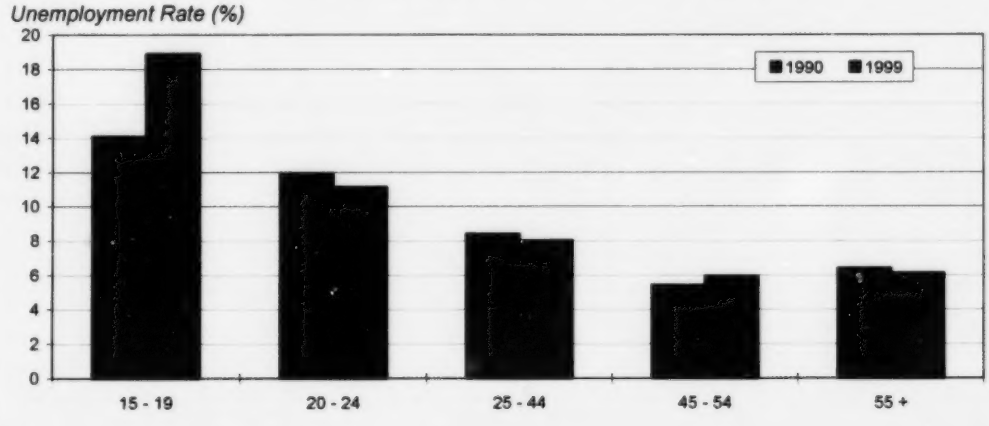
Employment and employment earnings of youth greatly depend on their level of educational attainment and current participation in the education and training system. Their employment outcomes are difficult to see while they are still youth as many move in and out of the labour force and education and training system for an array of reasons. Some change fields after finding that employment in their original field was less satisfying than expected, forcing them to re-enter the education and training system. Others re-enter due to the difficulty of finding employment. Some temporarily leave the education system and find employment because they need a "break" from education or time to decide what education-to-career path to pursue. In addition, many youths have difficult transitions into the labour force.

The next section discusses the movements of youth into and out of the labour force for educational and other purposes. Some barriers to their transition into the labour force are also identified. Section 3.2 shows how labour force variables for youth differ according to their student status while section 3.3 shows how they differ by educational attainment. Section 3.4 discusses the implications of a number of indicators for the future labour market conditions of today's youth. These indicators include the current labour market performance of today's adults, employment projections by occupation, the estimated educational and training requirements of those projections, and the current educational attainment of today's youth and adult population. Section 3.5 discusses youth earnings by educational attainment. Finally, section 3.6 discusses trends for youth who are unemployed and not engaged in education or training.

3.1 Youth have a higher incidence of unemployment but make quicker transitions out of unemployment than all other age cohorts

- *Unemployment rates are far higher for the two youth cohorts than all the older ones in BC.* This reflects the high tendency of youth to move in and out of the labour force and between jobs. It is concerning that youth unemployment rates have not come down significantly given that their labour force participation rates during the 1990s fell by 10 percentage points (this is examined below in Section 3.2).

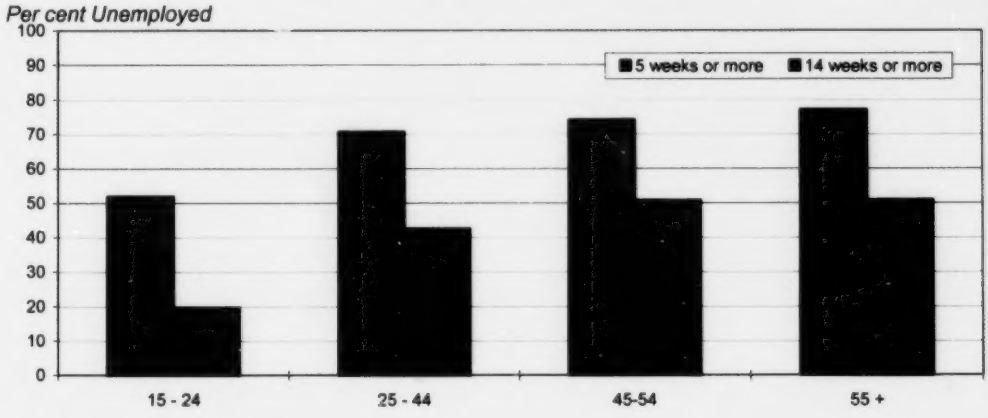
Chart 3.1: 1999 Unemployment Rates by age group in BC



Source: Statistics Canada, Labour Force Survey

- *The average duration of unemployment is much shorter for youth than adults.* The average duration of unemployment was 22 weeks for adults (aged 25 to 44) but only 12 weeks for youth (aged 15 to 24) in 1999. Although this does imply that youth are more adaptable, there are a number of possible reasons for this. It may simply reflect their ability or willingness to accept lower wages. It may also reflect the greater amount of effort that youth exert when looking for employment. Motivation to find employment may be enhanced for youth because of their significantly lower eligibility to collect employment insurance benefits. They are also more likely to exit the labour force altogether in order to re-enter the education and training system in response to prolonged unemployment. Other youth may only be unemployed for short periods of time because they are only in the labour force between school semesters.

Chart 3.2: Duration of Unemployment in 1999



Source: Statistics Canada, Labour Force Survey

- *Rural youth.* Opportunities for successful employment transition within their own community are lower for youth outside of "urban BC", that is, outside of the Lower Mainland, Greater Victoria, and Kelowna regions. Employment growth in BC over the past decade has been concentrated in these urban centres and the highest unemployment rates are outside of these. Rural youth often move to higher employment regions in order to make successful transitions into the labour market.

- *Aboriginal youth.* Aboriginal youth face higher barriers to successful employment transitions and/or post secondary transitions than other youth. These are related to lower high school graduation rates, greater rates of family poverty and/or dependence on income supports, discrimination, and the economic disadvantages associated with living outside of urban BC.

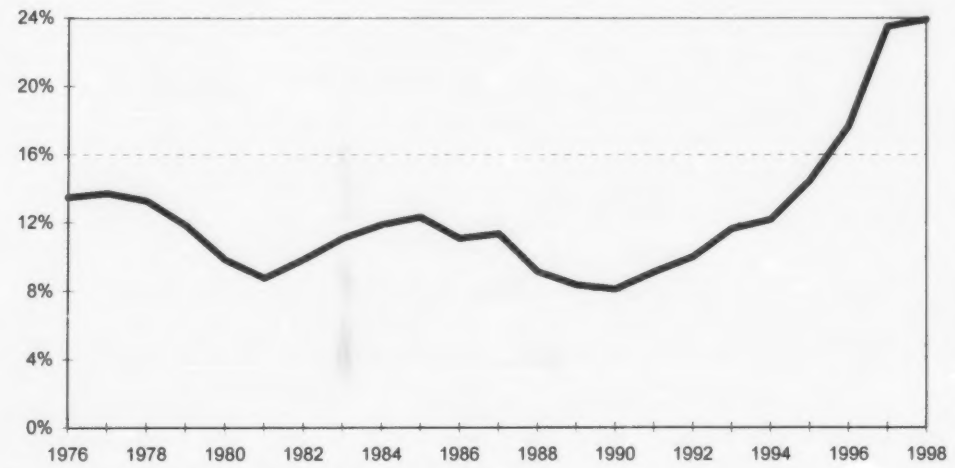
- *Youth in families in poverty, including families on income assistance, have more difficult transitions.* Youth in families receiving BC Benefits are much less likely than other youth to graduate from high school. Preliminary evidence suggests that only 15% of such youth in BC graduate from high school. (MSDES Research Branch)

- *Two strikes: low education and little or no work experience.* The pattern of higher unemployment rates for those with the least educational attainment is similar to that seen by the core adults aged 25 to 54. What is different for youth is the greater differential in unemployment rates between those most and least educated owing to the fact that many youth also have the disadvantage of little or no work experience

- *Youth who do not complete high school:* Labour market data continue to confirm that these youth are at a disadvantage in finding work and in finding work which provides adequate income. The unemployment rate for youth with less than secondary completion increased during the 1990's and is now nearly twice that for youth with secondary completion or higher.

- *Youth with no paid work experience continues to climb.* Leaving aside issues of educational attainment, the proportion of youth in BC who have never worked in *paid* employment has been rising dramatically in the 1990's. As seen in Chart 3.3 below, the portion of BC youth with no paid work experience reached 24% in 1998. This is particularly problematic given that a key criterion used by employers in hiring workers is that of prior work experience.

Chart 3.3: BC youth with no paid work experience continues to climb.



Source: Labour Force Survey, Statistics Canada, unpublished data

- Note that neither Career and Personal Planning (CAPP) work experience, or volunteer work experience, is considered work experience by Statistics Canada in this context. The CAPP program does help to address this issue of lack of work experience but can not be seen as a substitute for paid work experience or to ameliorate the fact that fewer youth are securing paid work.

- The Table below notes the proportion and numbers of BC youth with no paid job experience. Over the 1990's the proportion of youth who have never worked at a paid job has increased significantly. Youth of all ages have less work experience than they did at the start of the decade. Younger youth continue to have higher job inexperience rates than older groups of youth. While the rate doubled for those aged 15-16 to 59.7% by 1998, the rate for those aged 17-19 tripled from 7.9% in 1989 to 26.3% in 1998. In terms of numbers of youth with no paid job experience, about half (61,300) are aged 15-16, while the other half (60,600) are youth aged 17 to 24. This latter group contains the prime post-secondary aged cohort.

Chart 3.4: BC Youth with No Paid Job Experience, 1989 vs. 1998

	1989			1998		
	Population '000	No Paid Job Experience %	'000	Population '000	No Paid Job Experience %	'000
Age Group						
15-24	**442.1**	**8.3%**	**36.7**	**510.2**	**23.9%**	**121.9**
15-16	80.0	27.4%	21.9	102.7	59.7%	61.3
17-19	131.6	7.9%	10.4	153.2	26.3%	40.3
20-24	230.5	2.1%	4.8	254.3	8.0%	20.3

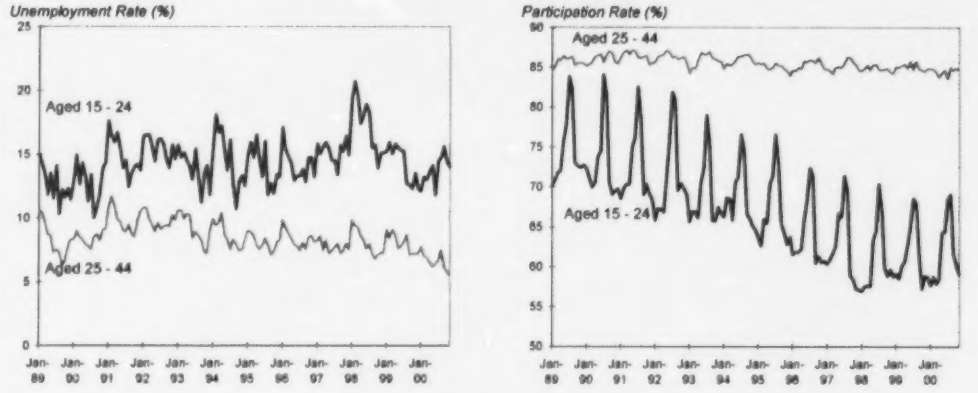
Source: Labour Force Survey and MAETT estimates based on LFS

- Growth in the proportion of youth with no paid job experience is partly a consequence of the rise in post-secondary participation seen during the 1990's in BC. Full-time students are much less likely to work, and hence, in relative terms, are less likely to ever have a paid job. Also, the employment rates for students during the summer in the 1990's have continued to fall, contributing to the rise in job inexperience rates for youth who are students. While the above data are not available by student vs. non-students, it is very likely the job inexperience rates for students are higher than for non-students. These explanatory trends and factors are of little comfort, however, as the bottom line is a growing proportion of secondary and post-secondary youth with no paid job experience, which raises a number of concerns. One concern is the associated fall in a key income source for youth, which in many cases makes it impossible to attend or continue post-secondary studies. Another concern is an increase in school to work transition adjustment difficulties with a greater proportion of youth unable to offer prior paid work experience, which employers expect and often require. Programs like Summer Student Works, which provide the opportunity for job experience and earnings for youth, are critical given the clear increases in youth job inexperience seen during the 1990's in BC.

3.2 Labour Force Variables by Age and Student Status

- *Youth unemployment rates continue to be significantly higher than those of prime working age adults.* The difference in unemployment rate between youth and adults aged 25-44 has widened. Youth unemployment rates in BC reached a peak for the 1990's of almost 19 per cent during early 1998, and have since fallen considerably, especially during the second half of 1999 through to the present (see Chart 3.5). However, this "improvement" in the youth unemployment rate is not so clear when considered over the past ten years once their labour force participation rate is examined.

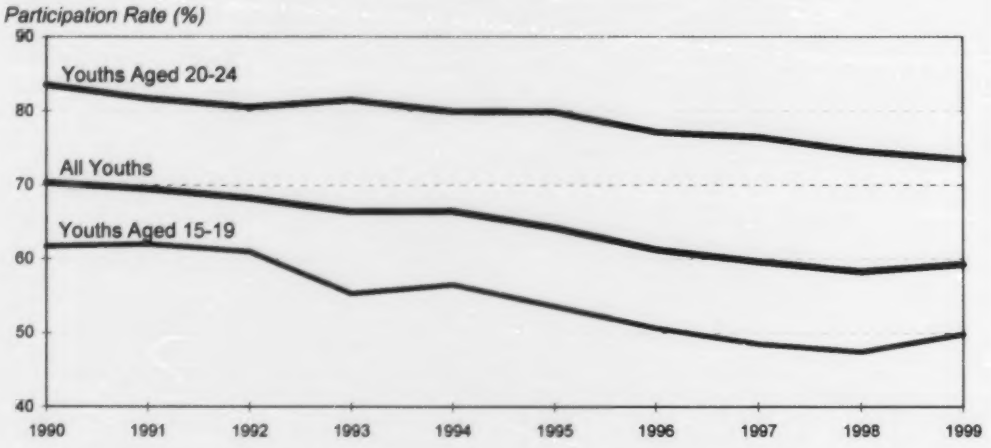
Chart 3.5: BC Youth and Adult Unemployment Rate vs. Labour Force Participation Jan 1989 to Nov 2000



Source: Statistics Canada, Labour Force Survey

- *The labour force participation rate is greater among older youth than younger youth and declined for both over the 1990s.* Younger youth experienced a decline of 19 per cent in their participation rate, far greater than the 12 percent decline experienced by older youth. By 1999 participation rates reached 50 and 73 per cent for younger and older youth respectively.

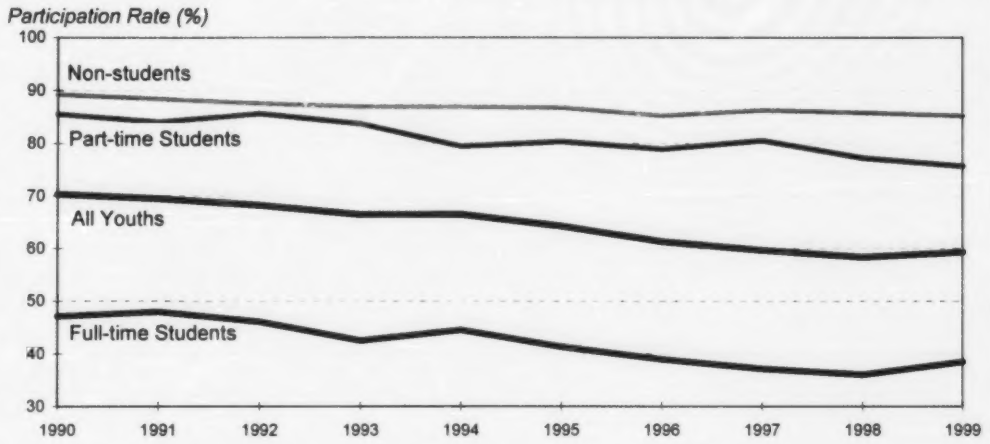
Chart 3.6: Labour Force Participation Rates of Youth, Aged 15 to 19 and 20 to 24 Jan-Apr and Sep-Dec Average, 1990-1999



Source: Statistics Canada, Labour Force Survey

- *Labour force participation rates declined for youth regardless of their student status.* Increased student enrollments in education and training accounted for a large portion of the decline in their labour force participation rates. However, participation rates declined even within the populations of full and part-time students. This suggests that increased student enrollments are only part of the explanation for declining labour force participation. Further, youth labour force participation has declined despite the declining full-time to part-time student ratio as seen in Chart 2.4.

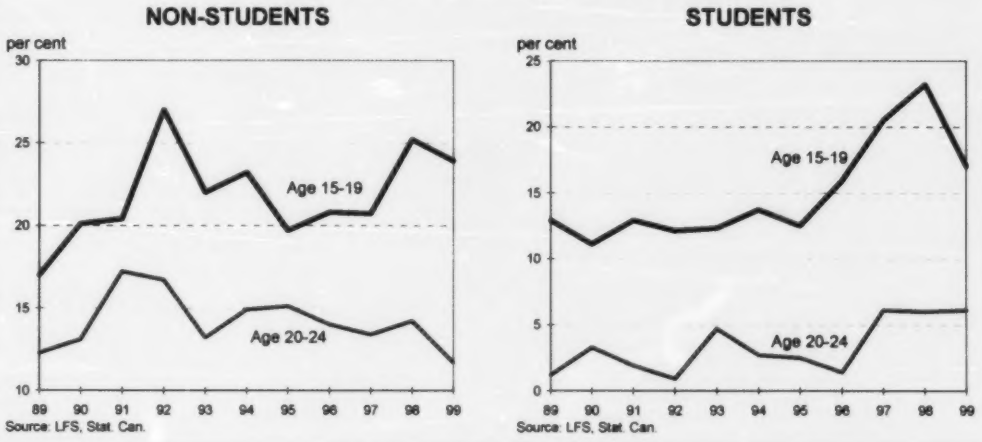
Chart 3.7: BC Youth Labour Force Participation Rates by Student Status Jan-Apr and Sep-Dec Average, 1990-1999



Source: Statistics Canada, Labour Force Survey

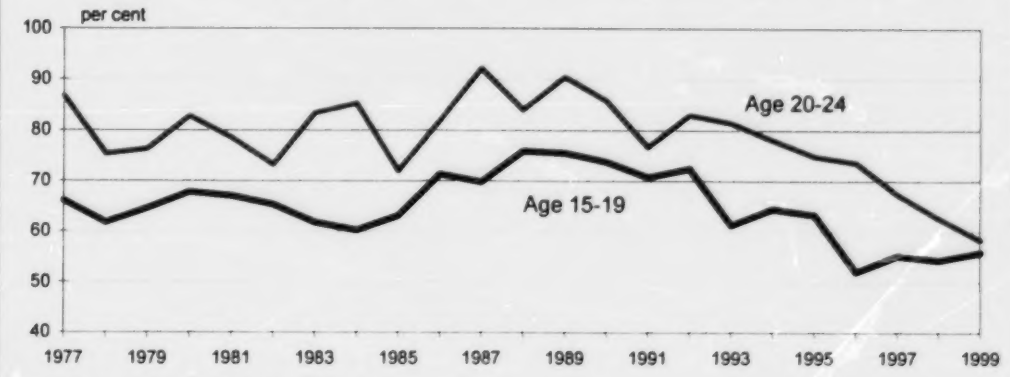
- When unemployment rates are examined for younger and older youth by student and non-student status, the results for 1999 have improved over 1998, but are much less encouraging when compared to conditions at the turn of the last decade (see Chart 3.8).
- The largest two groups of youth - students aged 15 to 19 and non-students aged 20 to 24 - saw the biggest unemployment rate decreases between 1998 and 1999. Yet the former still has a significantly higher unemployment rate than seen in the first half of the 1990's, while for non-students aged 20 to 24 their unemployment rate "improvement" between 1998 and 1999 was mainly the result of those who were previously unemployed in 1998 who dropped out of the labour force in 1999. Non-students aged 20 to 24 recorded their lowest level of labour force participation in 1999 for the decade.
- Unemployment rates for younger youth aged 15 to 19, both students and non-students, continue to remain significantly higher than for those aged 20 to 24. That these rates continue to remain so high, despite such a significant and persisting decline in their labour force participation, is considerable cause for concern.

Chart 3.8: BC Youth Unemployment Rates
Jan-Apr and Sep-Dec Average, 1989-1999



- *Labour Force Participation in July is dropping for returning full-time students.* Full-time students in March who intend to return to school in September traditionally work in the summer months. Up to the mid 1990s older students had a participation rate on average of 80% in July. In the late 1990s this rate has steadily declined to a low of 58.3% despite the increasing proportion of students enrolled in working in paid employment through co-op programs as well as federal and provincial summer employment programs. The decrease in labour force participation by older youth may be explained by choosing, or opting to in the face of limited work opportunities, to stay in school over the summer months. Younger students (age 15-19) show a similar pattern. Where they had a summer participation rate of over 75% in the late 1980s, their participation in the labour force has dropped to 55% in the late 1990s. As high school students do not usually have the option of staying in classes over the summer, other reasons for declining participation rates must be found. In an economy where there are only so many low skilled entry level jobs to be found, young students must compete with older more experienced students for the same summer jobs.

Chart 3.9: BC Labour Force Participation Rate of Returning Students in July

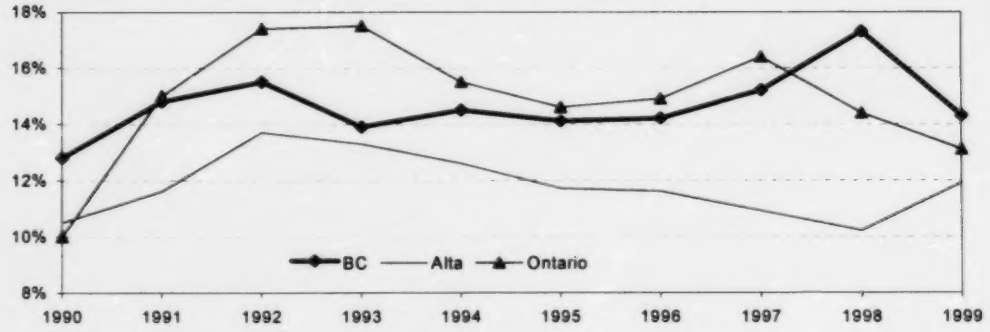


Source: Statistics Canada, Labour Force Survey

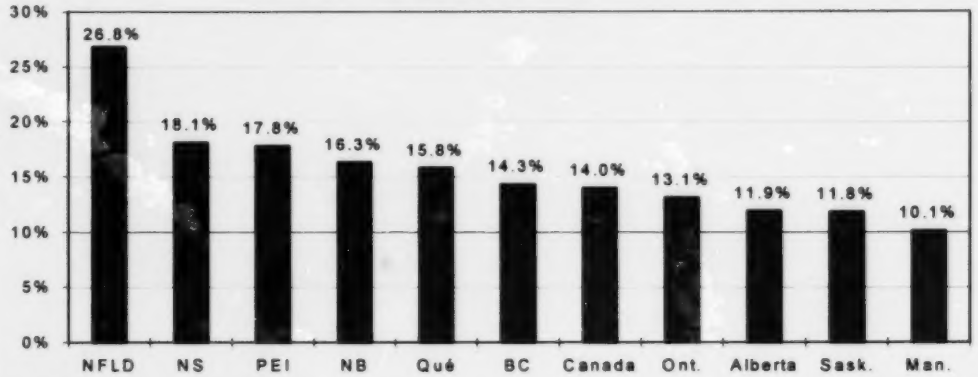
- *Unemployment rates of Youth* aged 15-24 *were higher in BC than in Alberta through out the 1990s.*. They were also higher than all provinces west of Quebec in 1999. The recession in the early 1990s hit Ontario the hardest and Alberta much less severely. This is reflected in the high unemployment rates of youth in Ontario and their recovery in recent years. Unemployment rates of youth in BC were comparable to the Canadian average of 14 per cent in 1999.

Chart 3.10: Unemployment Rates for Youth Age 15-24

Panel A: BC, Alberta, and Ontario, 1990 through to 1999



Panel B: Canada and the Provinces in 1999

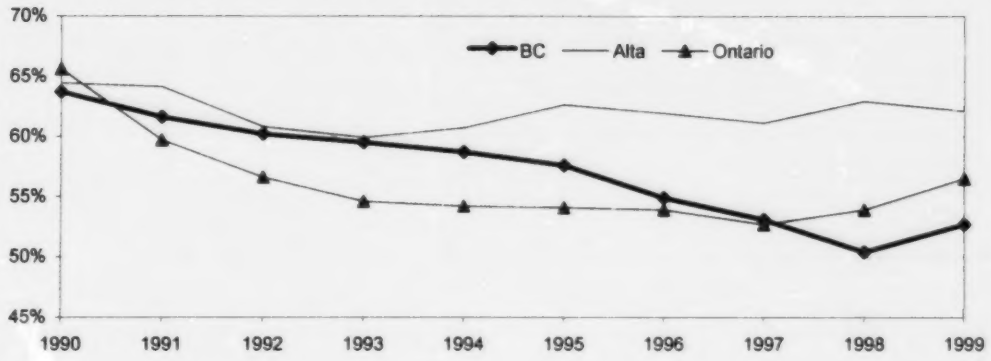


Source: Statistics Canada, Labour Force Survey

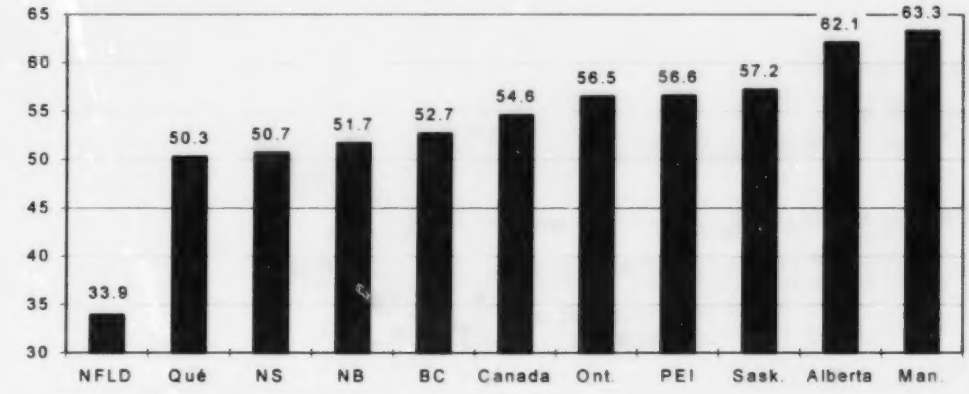
- *Employment rates (employment/population ratio) for youth age 15-24 in BC fell drastically between 1990 and 1996 and have yet to recover.* This contrasts with consistently higher employment rates for youth in Alberta and recovering rates in Ontario which fell more quickly during the recession but recovered sooner than those in BC. Many youths in BC during this period dropped out of the labour market altogether, primarily to stay in or return to school. Youth employment rates were higher in PEI and all provinces west of Quebec in 1999 than in BC. BC youth employment rates were lower than the Canadian average of 55 per cent in 1999.

Chart 3.11: Employment Rates for Youth Age 15-24, BC, Alberta and Ontario

Panel A: BC, Alberta, and Ontario, 1990 through to 1999



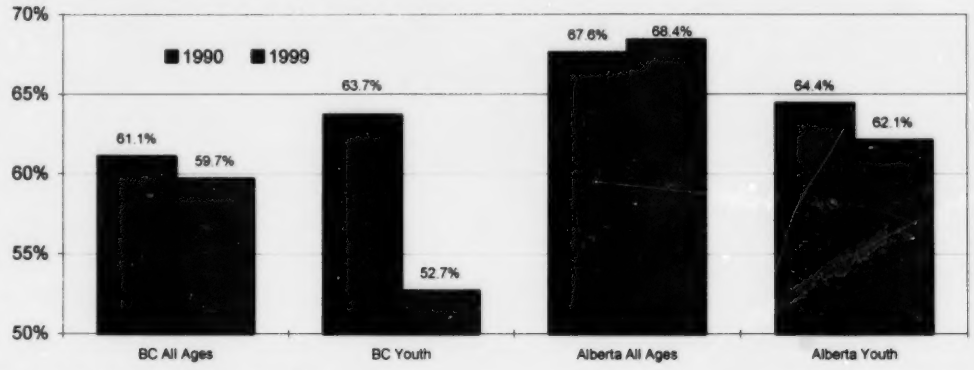
Panel B: Canada and the Provinces in 1999



Source: Statistics Canada, Labour Force Survey

- *Employment rates for youth fared poorly compared to adults.* Comparing 1990 to 1999, youth employment rates dropped 11% in BC compared to only 1.4% for adults. Alberta youth also saw a drop in employment rates even while rates for adults were increasing, but the decline was not as severe as that for BC youth. This reflects fewer opportunities in BC, and hence less stimulus to look for work, as well as the expansion of post secondary seats in BC which took some youth out of the labour market.

Chart 3.12: BC and Alberta Overall and Youth Employment Rates

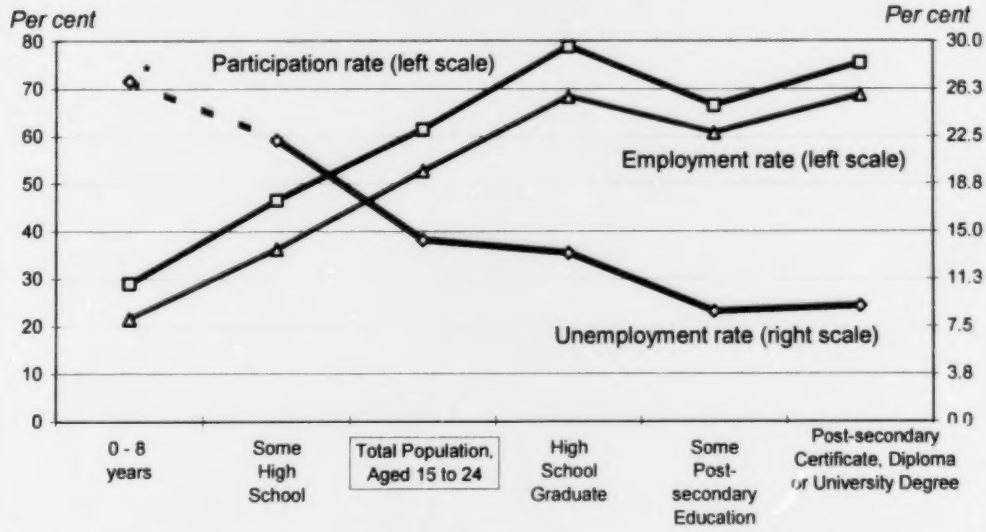


Source: Statistics Canada, Labour Force Survey

3.3 Labour Force Variables of Youth by Educational attainment

- *Youth with higher levels of education generally have higher labour force participation rates and employment rates, and lower unemployment rates, as shown in Chart 3.13 below.* The one exception is that youth with some post-secondary education experienced both a lower employment rate and participation rate than those with only high-school graduation. This reflects a relative jump in the level of time commitment required to pursue education beyond the high-school level, requiring many to leave the labour force before furthering their education.

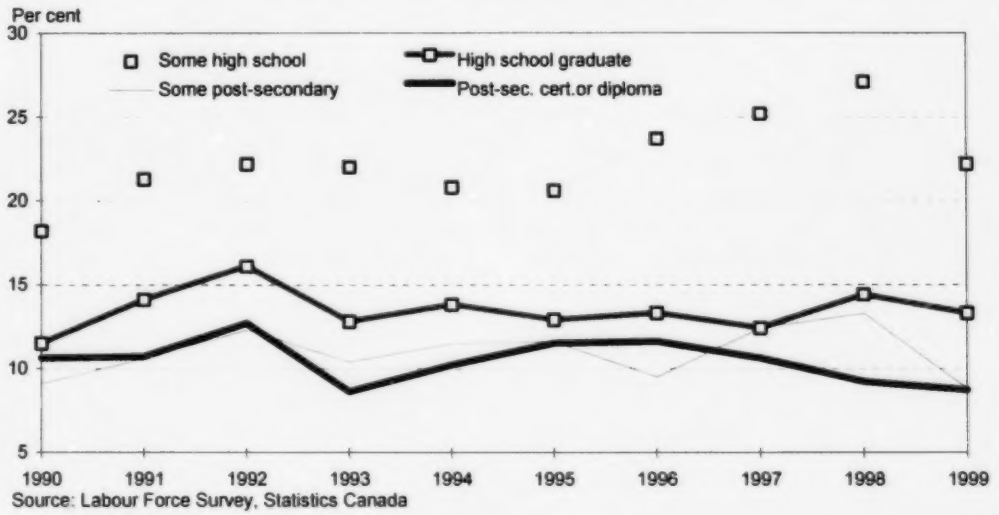
Chart 3.13: Employment Indicators for Youth (Aged 15 to 24) by Educational Attainment in 1999



* The unemployment rate for youth with 0-8 years of education is unavailable due to a small sample size. For illustration purposes, an average of all available unemployment rate observations in 1990 is used. These years include 1990, 1991, 1992, and 1995.
Source: Statistics Canada, Labour Force Survey

- *Unemployment rates are consistently higher for youth with lower levels of educational attainment across time.* Chart 3.14 below shows that unemployment rates are higher for youth with less education through out the 1990s.

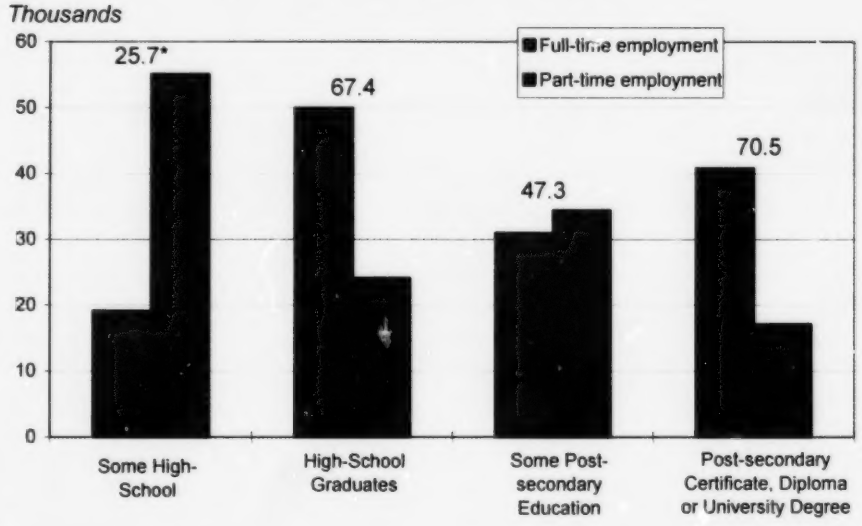
Chart 3.14: Youth with lower educational attainment have much higher unemployment rates.



Source: Labour Force Survey, Statistics Canada

- *Employment levels and proportions of full-time employment vary considerably across educational attainment levels for youth as noted in Chart 3.15 below.* Youth with only some high-school experienced the lowest full-time employment rate (proportion of employed that were full-time) of 26 per cent in 1999. This reflects the fact that these youth are, on average, younger than that of the three categories of higher educational attainment and more likely to be living at home, reducing their need to work full-time. The lower full-time employment rate experienced by youth with some post-secondary education than that of the high-school graduates reflects their increased time commitment to education.

Chart 3.15: Full-time and Part-time Employment Levels of Youth (Aged 15 to 24) by Educational Attainment in 1999



* Per cent of Employment that is Full-time
Source: Statistics Canada, Labour Force Survey

3.4 The Labour Market Future of Today's Youth

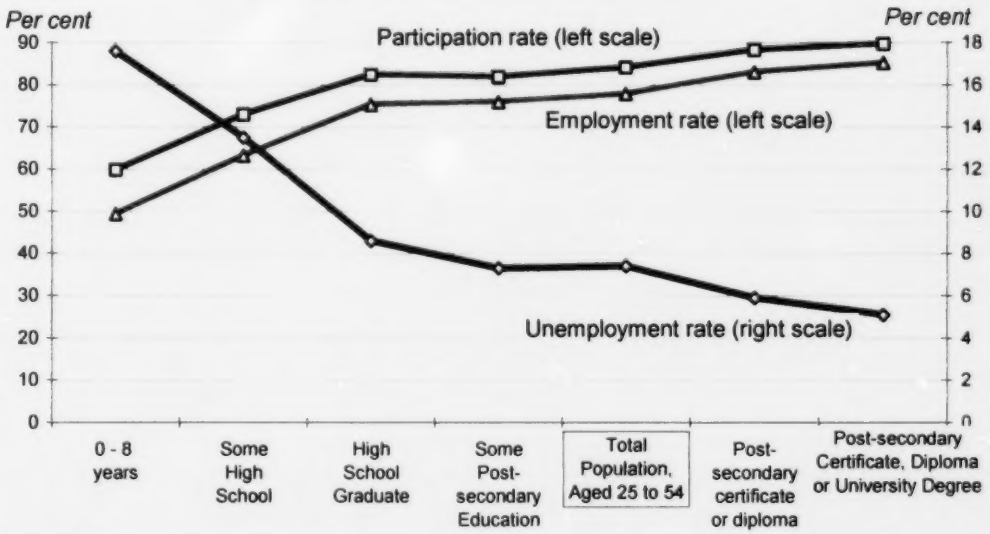
Since youth is a temporary stage of life associated with many adjustments and transitions, true labour market outcomes are not observable until youth reach adult-hood. For this reason, labour force variables of current adults by educational attainment is a useful indicator of the future labour market outcomes of current youth. Another indicator is the projected employment openings by educational attainment which should be compared to the growth in the educational attainment of youth. Demographic trends such as the impending retirement of the baby-boom generation as noted in the demographics section above are also important.

3.4.1 Education and Employment of Adults (Aged 25 to 55)

The educational and training attainment of BC's population has been rising steadily since the 1960's. Labour market outcomes in terms of wages, employment rates, and unemployment rates continue to be superior for those with higher levels of education. Currently, about 53.2 per cent of the prime working age population (aged 25 to 54) possess a Post-Secondary Certificate, Diploma or University Degree, up from 43.2 per cent in 1990. However, it is estimated that 72.4 per cent of the projected employment openings accruing from 1998 to 2008 will require post-secondary completion as seen in Chart 3.20 below. With only 53.2 per cent of the prime working age population qualified to fill 72.4 percent of the employment openings, youth with post-secondary completion will have a strong labour market advantage.

The same labour force variables that were shown for youth in Chart 3.13 above are also shown for adults by educational attainment category in Chart 3.16 below. In the case of adults, it is without exception that their labour force participation rates increase, employment rates increase, and unemployment rates decrease with higher levels of education as shown in Chart 3.16 below. Chart 3.25 shows that real earnings follow a similar pattern. These patterns will only be reinforced through to 2008 if future education requirements are as predicted in Chart 3.20 below. Chart 3.26 shows that the percentage differences in average earnings between those with and those without post-secondary completion is on the rise. This suggests that the employment demand for those with post-secondary education is growing relative to those without. Therefore, youth with higher levels of education will generally have greater future success in terms of employment and earnings.

Chart 3.16: Employment Indicators for Adults (Aged 25 to 54) by Educational Attainment in 1999

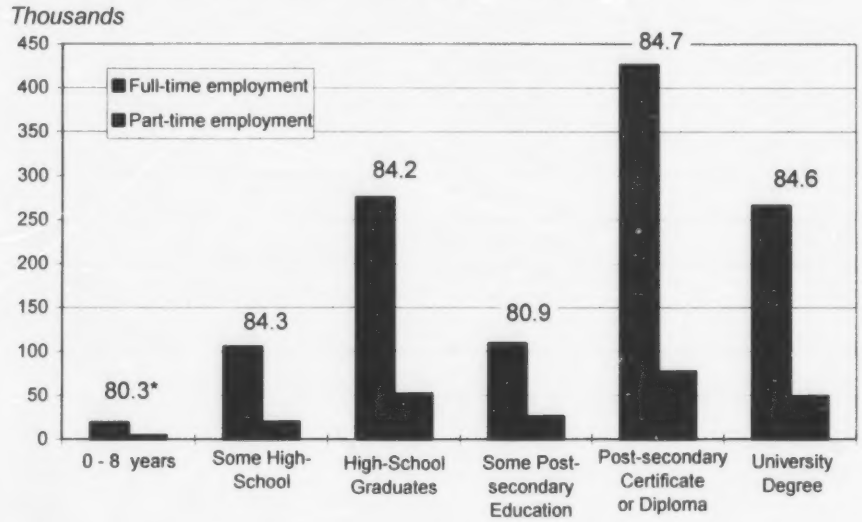


Source: Statistics Canada, Labour Force Survey

Adults generally have a much higher full-time employment rate than youth at all levels of education as seen by comparing Chart 3.17 below with Chart 3.15 above. This reflects the fact that there is a much higher proportion of youth who are full-time students and not available for full-time work than adults. The full-time employment rate is also much less variable for adults, ranging from a low of 80.3 per cent for adults with only 0 to 8 years of schooling to 84.7 per cent for those with a post-secondary certificate or diploma. The range for youth was 25.7 to 70.5 per cent. This difference in variability reflects the many adjustments and other activities that youth tend to go through, including changing schools, levels of schooling, types of schooling, traveling, etc. As seen in Chart 3.16 above, the employment rate increases with higher levels of education without exception. The extent

to which total employment deviates from that trend is a function only of population differences.

Chart 3.17: Full-time and Part-time Employment Levels of Adults (Aged 25 to 54) by Educational Attainment in 1999



* Per cent of Employment that is Full-time
Source: Statistics Canada, Labour Force Survey

3.4.2 Projected Employment Openings by Occupation and Educational Attainment

Where, and in what occupations, today's youth will work depends on where and what employment opportunities will become available. Their perceptions of future labour market conditions affects their educational and training decisions and hence future labour market conditions.

While industry classification is simply concerned with the main business or function an organization performs (eg. a hospital is classified under Health Services), the actual work of those in an organization can be very diverse, ranging over many occupations ("what a worker does"). Economic forces and industrial employment changes which affect staffing levels, self-employment opportunities, and wage level differences have a considerable impact on the occupational side which is intertwined with education and training preparation and experience.

In looking at recent changes in occupational employment, Chart 3.18 examines the changes in the size of BC's experienced labour force between 1989 and 1999. In terms of broad occupational groupings, the 3 slowest growing areas are Primary Sector Occupations, Processing and Manufacturing, and Trades, Transport and Equipment Operator Occupations.

Chart 3.18: BC Experienced Labour Force by Occupational Group
Changes from 1989 to 1999

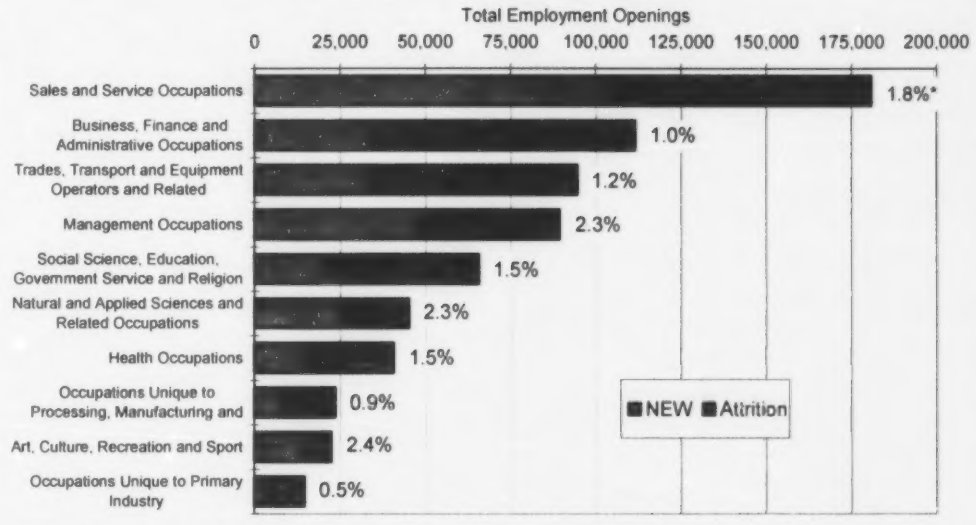
Occupational Category	Employment 1989	Employment 1999	Growth 89'-99'
Art, Culture, Recreation and Sport	38,800	67,500	74.0%
Natural and Applied Sciences and Related Occupations	73,600	118,700	61.3%
Social Science, Education, Government Service and Religion	82,100	126,200	53.7%
Management Occupations	143,200	199,900	39.6%
Sales and Service Occupations	381,800	512,300	34.2%
Health Occupations	74,100	95,300	28.6%
Business, Finance and Administrative Occupations	284,600	345,300	21.3%
Trades, Transport and Equipment Operators and Related Occupations	265,200	281,900	6.3%
Occupations Unique to Primary Industry	66,900	65,000	-2.8%
Occupations Unique to Processing, Manufacturing and Utilities	98,600	94,100	-4.6%
Total	1,508,900	1,906,400	26.3%

Source Statistics Canada, Labour Force Survey

Chart 3.19 below provides a future projection of employment openings by broad occupational groupings while distinguishing between net new openings and replacement openings due to attrition. Of the ten occupational groups, only four are projected to have over half of their employment openings result from growth in the number of new jobs. These groups include Management, Natural and Applied Sciences, Sales and Service, and Art, Culture, Recreation and Sport occupations. More openings are projected to become available for the Sales and Service group than for any other occupational group in terms of both new openings and openings from attrition. This is mainly a consequence of its relatively large size with an employment level of 521,820 in 1998 and a total of 180,940 openings projected through to 2008.

The Trades, Transportation and Equipment Operators occupational grouping is projected to see 94,620 employment openings between 1998 and 2008 in BC Only 35 per cent of these openings are from growth, with the rest required due to attrition. This overall occupational group is expected to offer the third highest number of employment openings, behind only the broad Sales and Services and Business, Finance and Administration occupational groups.

Chart 3.19: Projected Number of New and Retirement Openings by Occupational Type, 1998-2008



*Projected Average Annual Employment Growth
Source: COPS BC Unique Scenario, 1999

Beyond recent and projected changes in employment between broad occupational groups, there has been a skills shift within individual occupations themselves. Although this is difficult to quantify due to the static nature of specific occupational titles, it is occurring. The outcomes of work in many occupations may remain relatively unchanged, but how the outcomes are arrived at is fundamentally different. This shift requires higher and different levels of skills, adaptability and flexibility, including skills related to new technologies. This is presenting a considerable challenge to employers. At the same time it is creating new demands upon the education and training system.

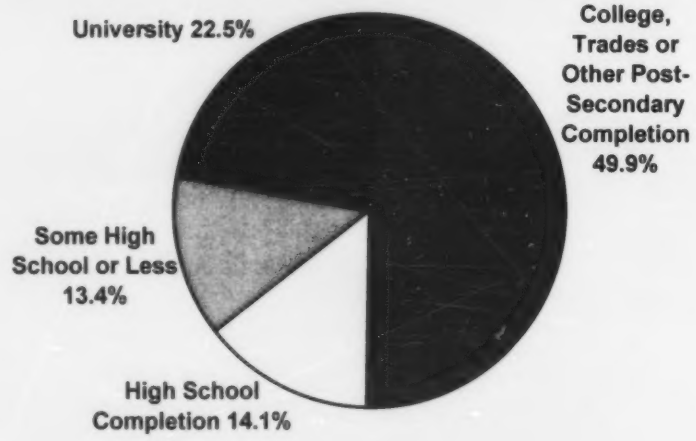
3.4.3 Training and Education Required by Projected Employment Openings

While occupational classification of workers has a closer relationship to education and training requirements than industry groups, it is not a simple or linear relationship of a one to one specific occupation to specific education/training requirement. Even within narrowly defined occupations, educational preferences between different employers can vary. Although we have employment data by occupation (both historical and projected on some 500 detailed occupational groups), many occupations have multiple education and training routes that lead to their entry. This makes it quite challenging to summarize each of the occupations into a single educational/training requirement or attainment level. Indeed such results need to be viewed with caution and recognition of limitations.

In examining the relationship between education/training to occupations in terms of employment we placed each of the over 500 detailed occupational group or portions of each group to one of four educational attainment/training requirement categories. This assignment is made on the basis of historical detailed data from the Census and on current information on occupational requirements. The four categories are University Completion, Other Post-Secondary Completion (including trades, vocational and career and technical programs), High School Completion, and Some High School or less.

In Chart 3.20 below, the share of projected job openings in BC between 1998 and 2008 for each of these four constructed "training or education groups" finds that about 72.4 per cent are in occupations requiring post-secondary completion. Since for the most part, the criterion used was "minimum," this illustration could understate the share of workers within particular occupations actually possessing university or other post-secondary training or education in lower skilled occupations. At the same time it could be argued that these first two constructed groups of occupations also contain within them a number of positions which require high school completion or some secondary plus additional skills learned through informal venues as opposed to strict post-secondary credentials. Real life examples include computer programmers in Java who are self-taught, newspaper staff reporters on major dailies that did not complete their journalism diploma program but who are talented writers, and carpenters without a trade certificate who learned informally on the job over a number of years.

Chart 3.20 Share of Projected Total BC Employment Openings, by Occupational "Training/Education Requirement", 1998-2008


University 22.5%
College, Trades or Other Post-Secondary Completion 49.9%
Some High School or Less 13.4%
High School Completion 14.1%

Source: COPS, CEISS

Attempting to link occupations to education/training "requirements" also does not adequately account for the differences between the overall employed population in which the assignments were based, compared to what employers currently expect of new entrants in terms of education or training or other skills. This is certainly the case with respect to

exact shares of employment demands, especially between the university and other post-secondary constructed categories.

So what then does such an exercise tell us? It appears that the demand side of the labour market is projected in the future to be overwhelmingly in favour of occupations requiring some type of post-secondary education or training versus those requiring only high school completion or less. Labour force data results of the 1990's backed by market intelligence and ground level observations from career counselors in BC would support such a projection of the future.

There appears to be an upward drift in educational and training requirements within occupational labels themselves. What has been occurring in many occupations is a rise in educational/training requirements or skills demanded by employers within specific occupational groups relative to the past. Some would suggest part of this relates to the "credential" being used as a convenient screening device for job applicants. However, employer survey evidence suggests that the importance of "credentialism" is declining relative to the importance of skills, knowledge, and abilities in an applied and generic sense. Arguably, employers view secondary and/or post-secondary participation as an important, but not the only determinant of skills, knowledge, and abilities of potential employees. In fact, it might be suggested that formal and informal learning is mutually reinforcing (Rubenson, 1997a).

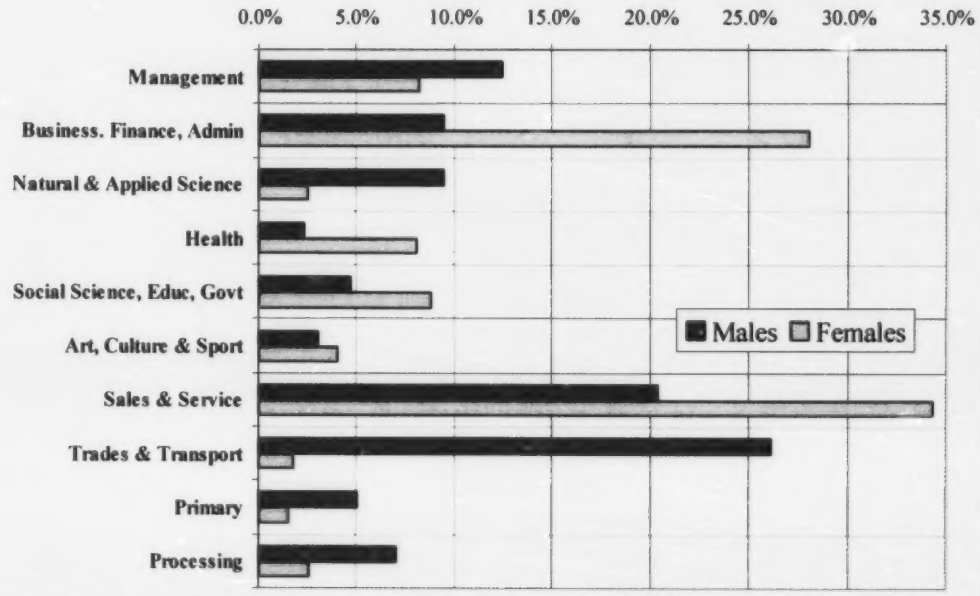
Many more workers than in the past are being required to adjust quickly to changes in their jobs and how they perform them. Adaptability applies especially to those entering the labour market in their late teens or early 20's, who do not have the benefit of considerable work experience. "Employability skills" such as problem solving and communication skills (or whatever one might call them) as well as content or applied skills can be developed through both post-secondary education or training and informal methods or life experiences. When combined with a willingness and acceptance to continually learn throughout life, these elements appear to be a useful foundation for individuals to successfully adapt to a rapidly changing labour market environment. At the same time, different content and applied skills do matter greatly to employers. It is a fact that there are differing relative demands for various occupational areas against available supply in terms of persons from various related fields of study who possess content and applied skills. Although this is difficult to establish empirically, given the ongoing changes in relative demands for different kinds of workers, it cannot be ignored.

3.4.4 Youth continue to make traditional choices and restrict their options

- *Anticipated future employment conditions and personal interests and abilities are not the only factors guiding youth in their career path choices.* They also consider tradition and the career paths of their parents or other influential persons in their lives.

- *Female youth continue to choose, or by default, to enter a smaller range of occupations.* Women are over represented in business, finance and administration; health; and in sales and service occupations. Within these skill types, women predominate in many of the lower skill level jobs and/or lower wage jobs. Men are over represented in occupations in management; natural and applied science; trades and transport; primary industry related jobs; and jobs in processing (manufacturing). These tend to be either higher wage and/or highly unionized jobs, or higher skill level jobs with higher wages.

Chart 3.21: Distribution of BC Employment for Men and Women by Occupational Skill Type, 1999



Source: Statistics Canada, Labour Force Survey

- *Female youth continue to be less interested in science and technology at the post secondary education level than male youth.* In many science, mathematics and technology related programs at colleges, institutes and universities women continue to be under-represented. Engineering and computer science related programs lead to occupations with documented shortages and increasing wages. These market signals have not been sufficient to encourage more women to pursue these studies. This has implications for securing sufficient human resources for BC's high technology industry and, as a result, will affect economic growth.

Chart 3.22: Women Students in College and Institute Applied Programs

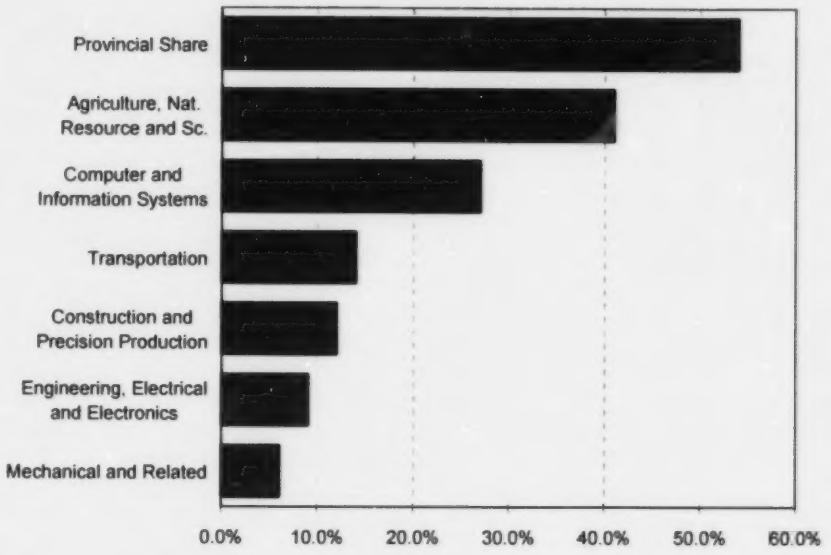
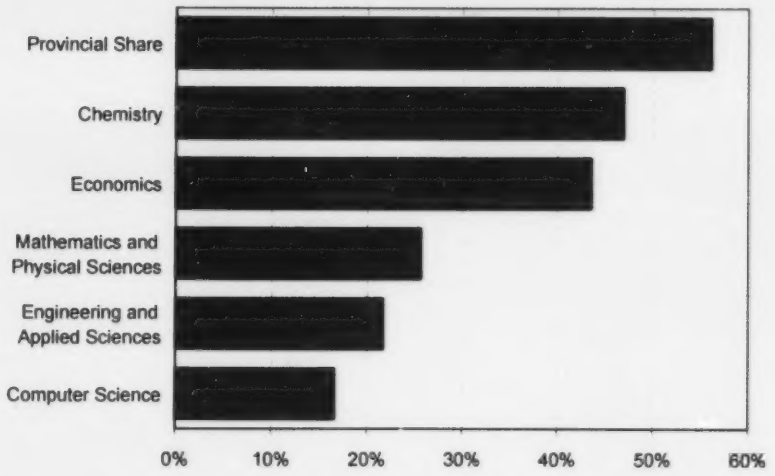


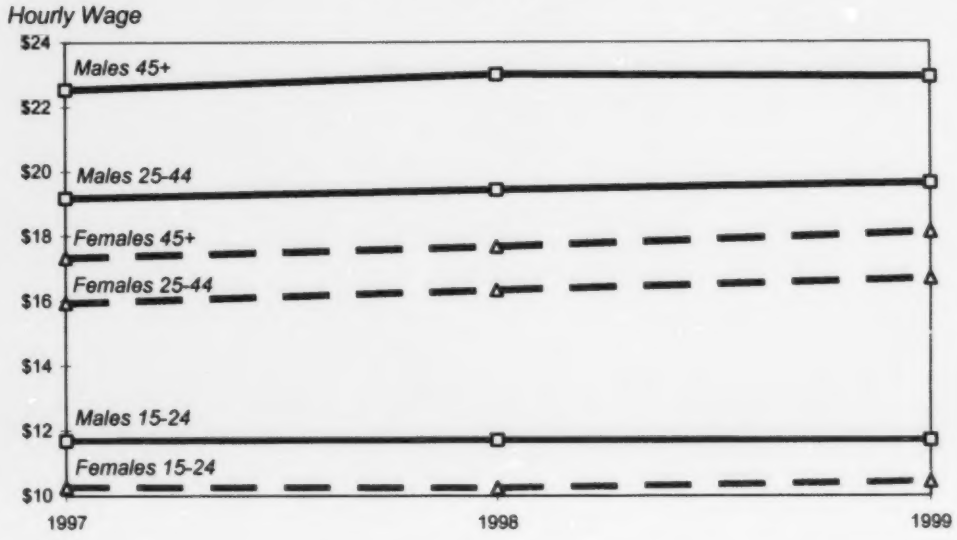
Chart 3.23: Women Students in University Programs



3.5 Earnings

- *Youth have smaller full-time employment earnings than all other age cohorts.* This is particularly true for female youth who earn the smallest average full-time hourly wage. The gender wage gap (wage difference as a per cent of female wages) for persons aged 15-24, 25-44, and 45+ was 12, 18, and 26 per cent respectively. Although student status is controlled for by only considering full-time employees, educational attainment and work experience account for much of the wage differences across age cohorts.

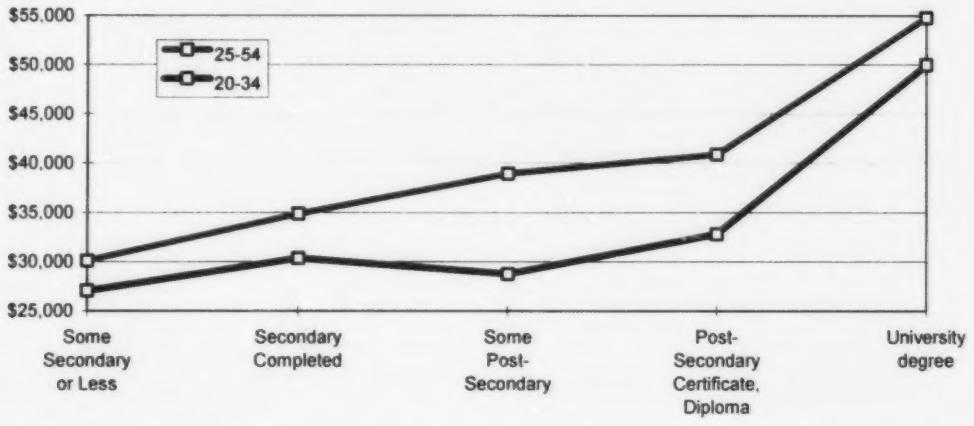
Chart 3.24: Average Hourly Wages of Full-time BC Employees by Gender and Age



Source: Statistics Canada, Labour Force Survey

- *Educational attainment has a significant and positive effect on average full-time full-year earnings.* Due to the small numbers of youth who are working full-time and have completed some form of post-secondary education it is not possible to show their earnings by educational attainment. Chart 3.25 below, however, shows that earnings increase rapidly with educational attainment for young adults and the core working age population. Much of the difference in full-time, full-year earnings between these two age cohorts can be explained by their differences in work experience as student status and educational attainment are largely controlled for. Work experience is an area that is lacking the most for the youth cohort.

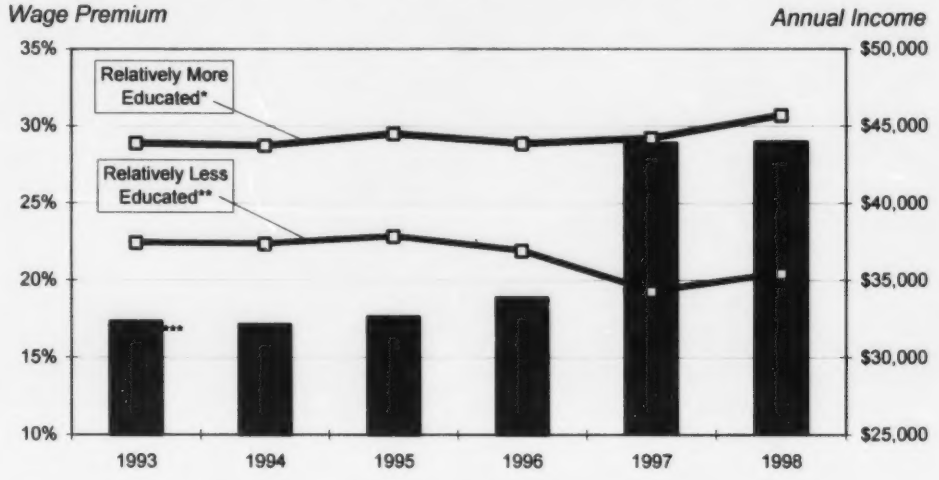
Chart 3.25: Average Full-Time, Full-Year Earnings in 1998 by Educational Attainment and Age in BC



Source: Stats Can., Survey of Labour and Income Dynamics

- *The wage gap between those with and without post-secondary completion is growing.* This is despite the growing educational attainment of BC's population as shown in Chart 2.10 above. From 1993 to 1998, the proportion of those aged 25 to 54 in BC with post-secondary completion grew from 45.7 per cent to 53.7 per cent. Over this same period, the difference in average full-time, full-year wages between those who have and have not completed a post-secondary education program grew from 17 to 29 per cent. This strongly suggests that the importance of education to life time earnings is growing. On average, youth with higher levels of education will exhibit superior future labour market performances as well as earn significantly higher incomes.

Chart 3.26: Average Full-Time, Full-Year Earnings of the Core Working Age Population Aged 25-54, and Their Wage Premium* For Holding a Post-Secondary Certificate, Diploma or University Degree, 1993 to 1998**



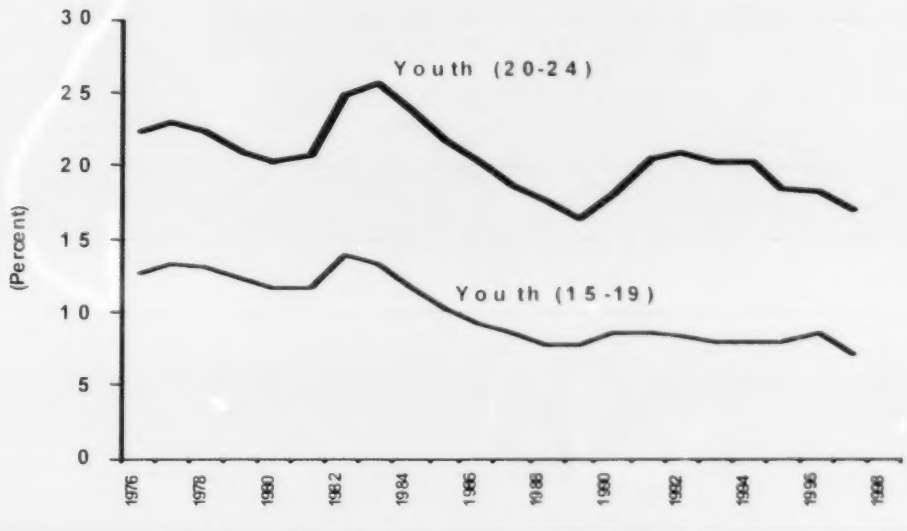
* Persons possessing a Post-Secondary Certificate, Diploma or University degree.
** Persons with some post-secondary education or less.
*** The extent that average wages are higher for those who possess a Post-Secondary Certificate, Diploma or University degree.
Source: Stats Can., Survey of Labour and Income Dynamics

3.6 Out of Work and no post secondary education or training

- Three out of ten youth aged 22 to 24 in Canada have relatively low levels of educational attainment (high school leavers and graduates who do not pursue further formal education and training).

- The proportion of youth in Canada not engaged in formal education and not employed was declining until the start of the 1990's, but has changed little during the 1990's. Those not in school nor working by 1997 stood at 17% for 20-24 year-olds and 7.2% for 15-19 year-olds. This group includes unemployed youth, those who have left the labour market to raise children, those who are discouraged from looking for work, and those who are not interested in looking for work and may be waiting to enter a post secondary program.

Chart 3.27: Percentage of Youth Not in Full-Time School and Not Employed, 1976-1997



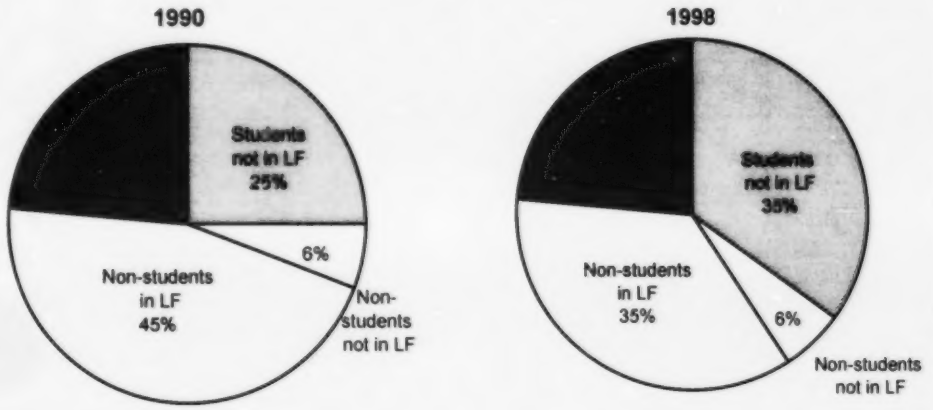
- For youth with little or no employment experience AND no post-secondary education or training, their current prospects in the labour market continue to be a major concern for society and the economy. The ongoing transition of the economy to one which is more knowledge-based suggests that the future prospects for many youth with little or no work experience AND no post-secondary education or training (including apprenticeship training) will continue to be difficult.

- Chart 3.28 below shows a comparison between 1990 and 1998 of the B.C. youth population in terms of student and labour force status. Over this period the youth population overall increased by 66,800. In 1990, approximately 49 per cent of youth aged 15 to 24 were students, compared to 59 per cent in 1998. Most of this was due to increased rates of participation in post-secondary education and training by youth (mainly for those aged 18 to 24).

- Looking at students, the major change was the absolute and proportional increases in the number of students not in the labour force. The absolute number of students in the labour force grew at the same pace of overall youth population growth resulting in no change in their overall proportion.

- For the non-student group, the key change was the absolute and proportional declines for those participating in the labour force.

Chart 3.28: Labour Force and Student Status of the BC Youth Population Age 15-24 (8 Month Average, Jan-April & Sept-Dec)



Source: Labour Force Survey, Statistics Canada

- Overall, the proportion of youth participating in the labour force in some capacity in 1998 was 59 per cent, compared to 69 per cent in 1990. Youth in general are now less likely to build work experience than in the past. The proportion of youth neither in the labour force or school remains at 6 per cent, but in absolute terms this group of individuals grew in number from 26,000 in 1990 to 30,000 in 1998. These at-risk individuals are neither participating in education or training or actively searching for employment.

4. Social Safety Net

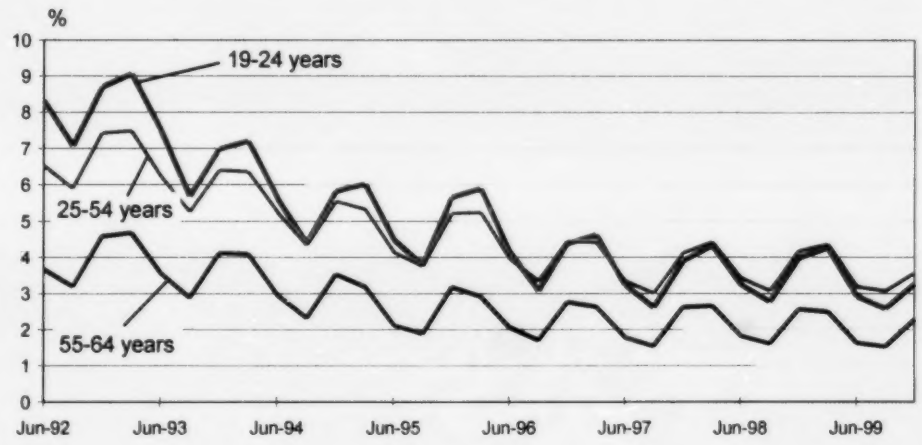
4.1 Changes to Federal Support Systems

- *The changes to Employment Insurance in the 1990's have affected youths more than other age groups.* EI regulations have been progressively tightened through the 1990's. The increased requirements to qualify for EI have meant that fewer youth qualify for benefits, and those who do access it for shorter periods.

- *The percentage of youths on Employment Insurance has been declining steadily.* The percentage of youth collecting EI hit a peak of 9.1% in the first quarter of 1993, but this percentage has significantly declined. In the third quarter of 1999 this rate hit an all time low of 2.6%, just under the rate for adults (25-54 years) of 3.1%.

- *The percentage of youth receiving EI benefits is very similar to those in excess of age 25 despite their significantly higher unemployment rates shown in Chart 3.1.* This is a strong indicator that youth have much less access to employment insurance benefits.

Chart 4.1: Percentage of Persons on Employment Insurance, by Age Group

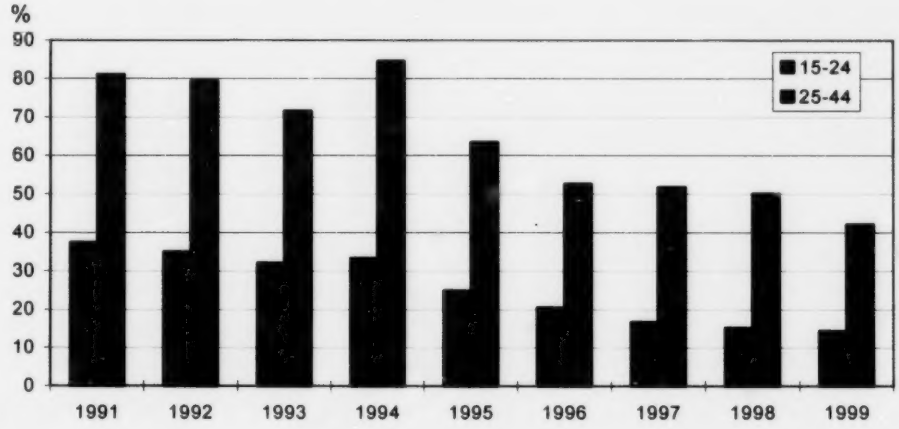


Source: HRDC Administrative Files and BC STATS Population Section Estimates

- *The Beneficiary to Unemployed ratio (B/U) is a statistic that is effective in showing the relative inaccessibility that youth have to employment insurance benefits.* It is the percentage of the unemployed population that receive EI benefits. The B/U ratio for adults was twice that for youth throughout the 1990s and was three times greater in 1999. The youth B/U ratio dropped from 37% in 1991 to 14% in 1999. The relative and declining accessibility of youth to EI benefits combined with their relatively high

unemployment rates point to the need for alternative forms of support such as programs that facilitate transition into employment.

Chart 4.2: B/U Ratio (EI Beneficiaries/Unemployed) for Youths and Adults, 1991-1999



Sources: Labour Force Survey (for unemployed) and HRDC (for EI beneficiaries).

- *The changes to EI have impacted women and youth the most.* This could be due to the fact that they are more likely to be part-time workers or new entrants to the labour market. Also, youth unemployment is often characterized by short periods of employment due to the nature of the school year. This reduces their eligibility for EI benefits. The B/U ratio for women of all ages in 1999 was 36%.

- *Female youth are more impacted by the changes than male youth.* Among youth, women have experienced the biggest drop in EI coverage, with their B/U rate dropping to 11.6% in 1998, from 44.1% in 1991. This is the lowest B/U ratio of any group by age/gender for BC.

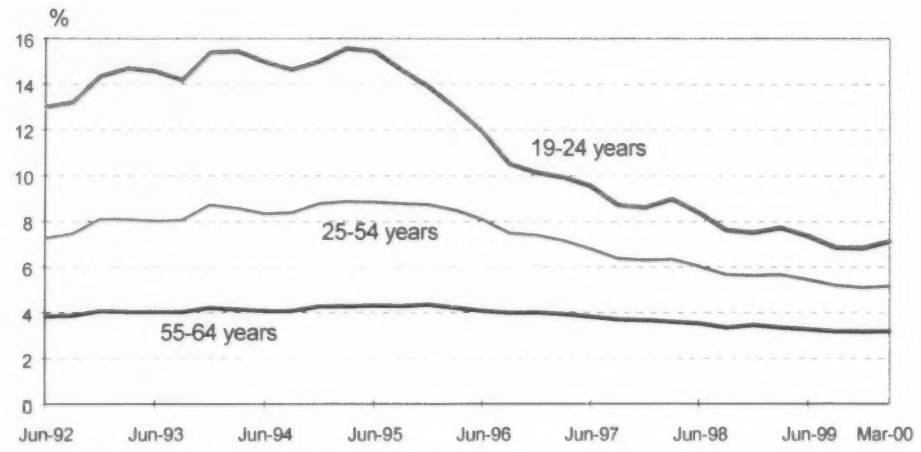
4.2 Provincial Support Systems Have Seen Similar Changes

- *Changes have also occurred to provincial income support systems.* Administrative changes to income assistance (IA) associated with the introduction of BC Benefits have reduced the overall number of youths receiving income assistance. These have included moving those unable to work into a persons with disabilities class and having students change over to student loans for income support.

- *Other changes to income assistance introduced in 1996 included changes to the policy of providing income support for those recipients who were pursuing post secondary education.* This switched these students from an income support to a student or personal loan for financing themselves through post secondary education. This has increased the reliance of these students on summer employment. The changes to income assistance have been somewhat offset for youth by the introduction of Youth Options BC programs.

- *More youth (persons between the age of 19 and 24), however, receive BC Benefits than other age groups.* On average, 7.2% of BC's youth were receiving BC Benefits at any one time during 1999, while 5.3% of the next oldest group (25 to 54), were receiving benefits. The lowest rate was among those aged 55 to 64 - 3.2%. It should be noted that for those 60 years of age or older, BC Benefits is only available if they do not qualify for an early Canada pension.

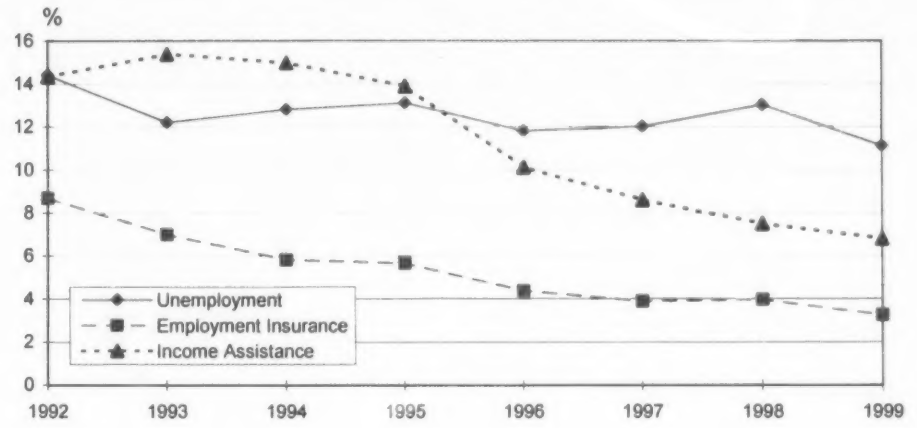
Chart 4.3: Share of Persons Receiving BC Benefits by Age Group, 1992-2000



Source "Basic BC Benefits Recipients" data from BC Stats. Excluded are disabled persons, children in the home of a relative, and OAS/seniors.

- *While traditional income supports for youth have declined, their unemployment rate has changed little.* Changes to both federal and provincial income support systems have reduced the number of youth receiving EI and IA benefits. The unemployment rate for 20-24 year olds declined from 14% in 1992 to 11% in 1999. In comparison, the percentage of IA beneficiaries dropped from 14% to 7%, and the percentage of EI beneficiaries from 9% to 3%, over the same time period.

Chart 4.4: Traditional Income Supports and Unemployment Among Youth, 1992-1999



Notes: Youth 19-24 years, except Unemployment rates which are for 20-24 years. Unemployment rates include only those looking for work. IA rates include students.

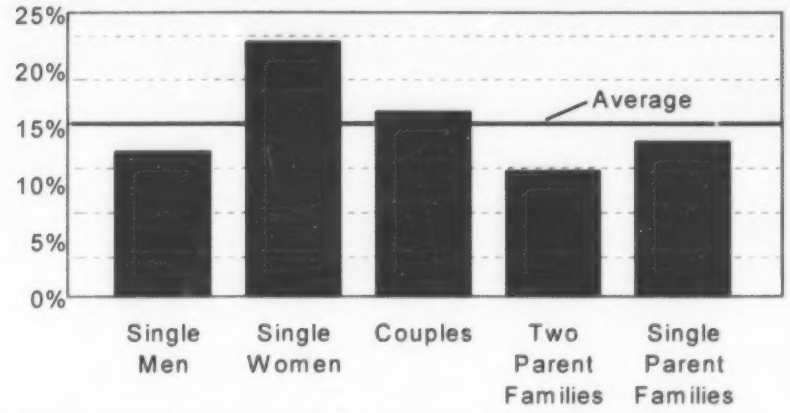
Source: Unemployment rates from Statistics Canada LFS; EI beneficiaries from HRDC; IA beneficiaries from MSDES.

4.3 Characteristics of Youth on Income Assistance

- *Youth on income assistance have much lower high school graduation rates than other youth.* A recent BC study on the links between high school graduation and income assistance found that only 15% of young Income Assistance recipients had completed their grade 12 in the high school system. This finding is broken down by family type in Chart 4.5. There was an estimated 30,756 youth receiving income assistance benefits in 1999, which means that only an estimated 4,613 have a high school diploma (Dogwood diploma).

- *Children of those on income assistance have less successful high school completion rates.* The same BC study found that these impacts are perpetuated across generations. Only 7.5% of the sons or daughters in income assistance cases that received benefits in January 1993 and were born in 1976 were in the graduation records for 1993, 1994, 1995, or 1996. This evidence suggests that youth from families on income assistance are more likely than other youth to become income assistance recipients. There was little difference in the results for children from single and two parent families.

Chart 4.5: Percentages of Youth on IA with Dogwood*, by Family Type



*A Dogwood diploma is a certificate granted to a student who meets high school graduation records.
Source: Ministry of Social Development and Economic Security

- *Specific details on the Ministry of Social Development and Economic Security study*: The study linked the cohort of students enrolled in grade 8 in 1990 with income assistance records to better understand the education attainment levels of those on income assistance (IA). In 1990, BC schools enrolled a total of 42,822 students in grade 8. In April 1999, 2,376 of those were on IA (5.5%) and of these, 2,217 were direct recipients of IA and 159 were beneficiaries in IA families.

- *Implications for secondary schools from the MSDES study.* A few high schools contribute a high proportion of youth on income assistance. About 1% of the schools (7 of 703) account for 10% of the youth IA cases. About 10% of the schools (70) account for half the youth IA cases. Individual schools contribute anywhere from 0 to 100% of their 1990 grade eight cohort to the IA rolls.

- *Youth couples with one or more children had the lowest incidence of traditional high school completion.* As Chart 4.5 indicates, single female youth had the highest graduation rate, 22%, while youth couples with a child had the lowest graduation rate at 11%.

5. Health and Wellbeing

5.1 Alcohol and Drug Abuse Among Youth

- *Alcohol continues to be the drug most abused by youth.* Most young people who seek help for substance dependency have an alcohol problem, followed by cannabis, cocaine and heroin dependencies. The number of young people admitted to alcohol and drug services in BC has been declining since 1990/91.

- *In a recent Statistics Canada survey of the Canadian population, 57% of youths (15-24) surveyed reported being regular drinkers (one drink or more per month).* The highest percentage of regular drinkers was in the 20-24 age cohort, 68% of whom reported drinking at least one drink per month. Fully 35% of those surveyed in the 15-17 age cohort reported being regular drinkers, even though they have not reached the age to legally purchase alcohol.

- *Drug use has increased among youth.* In a recent BC survey, 40 per cent of secondary school students reported using marijuana in 1998 up from 25 per cent in 1992. Youth also reported an increase in other illegal drugs. Among all age cohorts, BC has consistently reported the highest rate of drug crimes among the provinces since 1982.

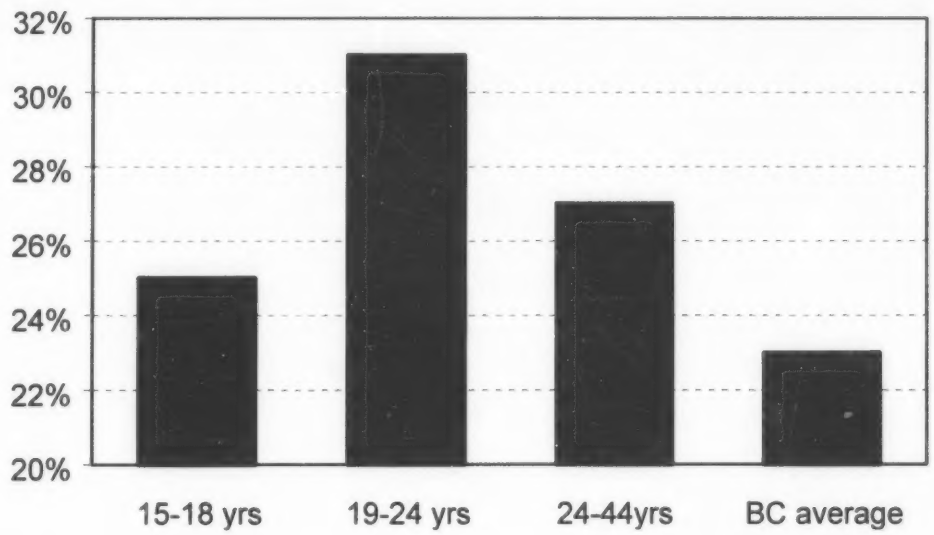
- *Youth engaged in substance abuse may have health, education, and motivation related issues.* They are also at risk for making successful transitions to post secondary education and training and into the labour market. These youth not only need help with their substance abuse issue, but need the help of programs and services that support successful transitions into post-secondary education and the labour market.

- *Drugs and alcohol took the lives of many BC youth in 1999.* A total of 28 males and 7 females between the ages of 15-24 died from alcohol related deaths. A total of 22 males and 6 females died form drug-induced deaths.

5.2 Youth Smoking Habits

- *Smoking remains popular among many youth.* The three age groups with the most smokers are also the youngest: 15-18 year olds (25% smoke), 19-24 year olds (31% smoke) and 25-44 year olds (27% smoke) compared to 23% for the B.C. population as a whole. Although cigarette smoking is declining steadily, it is usually older smokers who are quitting.

Chart 5.2: Youth aged 19 to 24 smoke more than any other age group.



Source: Statistics Canada

- *The average age for new smokers starting to smoke is unfortunately also dropping.* In Canada as a whole there is evidence that the only age group of smokers that is increasing is the 15-19 year olds.

- *Smoking is most prevalent among those with lower incomes and Aboriginals than the general population.* Youth in these population groups are most at risk for starting smoking.

5.3 Sexual Practices and Sexually Transmitted Diseases

- *Only moderate progress was made through the 1990's in terms of youths' safe sexual practices.* The AHS II study ('98) found that BC students are waiting longer to have sex, but that the percentage of sexually active youths using protection has not increased since 1992. Only 52% of sexually active females and 64% of sexually active males report using a condom in their last sexual interaction.

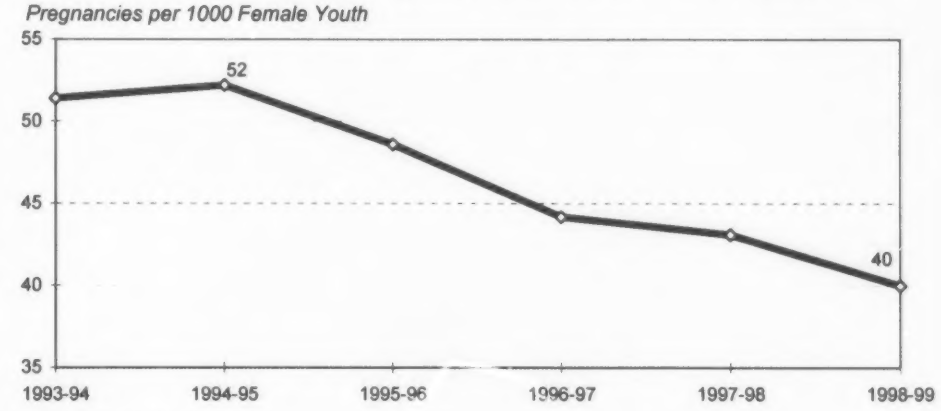
- *Many sexually active youth have multiple partners.* 27% of sexually active males report having had sex with four or more partners, opposed to 20% of females (AHS II, '98).

- *The rate at which youth are diagnosed HIV positive has been growing.* The 15-19 age cohort was the only one that experienced an increase in their HIV positive rate from 1998 to 1999.

- *Female youth had a slightly higher rate than male youth of testing HIV positive in 1999.* The number of HIV positive cases for every 100,000 persons was 2.32 for female youth and only 2.18 for male youth.

- *The teenage pregnancy rate has steadily declined since the early 1990's.* This broad measure of teenage pregnancies is the sum of live births, stillbirths and hospital or clinic abortive outcomes per 1,000 women in the 15-19 age group. The teenage pregnancy rate declined from 52:1000 in 1993/94 to 40:1000 in 1998/99.

Chart 5.3: Teenage* Pregnancy Rate in BC, 1993/'94 -1998/'99



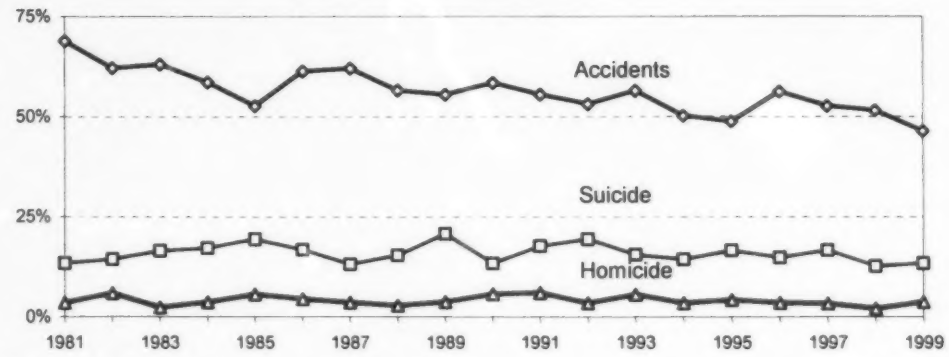
*Includes women 15-19 years of age.
Source: Vital Statistics Agency

- *Canadian women aged 20-24 have the highest rate of therapeutic abortions.* In 1998, 32 of every 1000 women in this age group had abortions. This is much higher than the next highest rates of 21 and 22 per 1000 experienced by the 15-19 and 25-29 age cohorts respectively.

5.4 Causes of Death Among Youth

- *Accidents and suicides continue to be the two leading causes of death among youth.* Accidents were responsible for 46% (149 deaths) of the 321 deaths in the 15-24 age group in 1999. Suicides were the second leading cause of death, followed by cancer.

Chart 5.4: Leading Causes of Death, Youth Age 15-24, 1981-1999

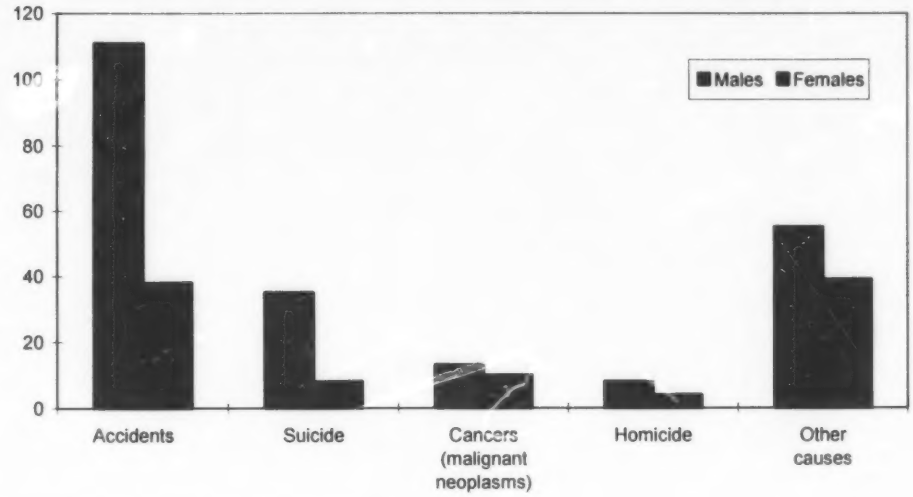


Source: Vital Statistics Annual Report, Ministry of Health

- *Males are more likely than females to be involved in accidents.* In a recent BC survey of secondary school students, nearly half of them indicated that they incurred an injury in the past year serious enough for them to require medical attention.

- *Many more young males died than young females.* As Chart 5.5 illustrates, the death toll for male youth was significantly higher than female youth in all the leading causes. In total, 222 male youth died in BC in 1999, compared with 99 female youth. Almost four fifths (79.9%) of the deaths from accidents and violence in this 15-24 age group were male.

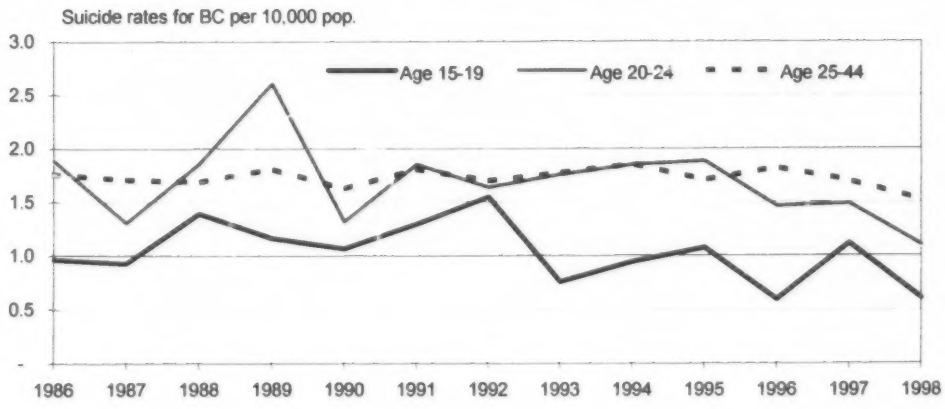
Chart 5.5: Number of Deaths by Type/Gender, Youths 15-24, 1999



Source: Vital Statistics Annual Report, Ministry of Health

- *The rate of suicide among youth has edged down in the past decade.* The suicide rate for older youth (20-24 years) remains higher than that for younger youth (age 15-19). Suicidal youth are more likely to skip school, engage in both binge drinking and eating, have a negative body image , low self-esteem, and in many cases have been abused, and feel emotional distress.

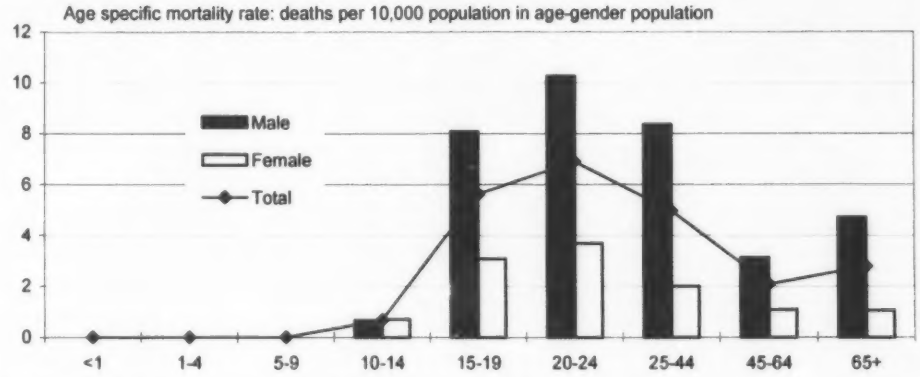
Chart 5.6: Suicides Rates by Age Group, 1986-1998



Source: Vital Statistics Annual Reports, Ministry of Health

- *Status Indian suicide rates are very high, especially among youth and young adults* - Status Indians have suicide rates more than six times the rate of the non-Native population. Not all Aboriginal communities experience high youth suicide rates. Preliminary studies suggest that youth suicide rates are lower for communities that have achieved self-governance, are engaged in land claims negotiations, have cultural facilities, and have control over local health and social services.

Chart 5.7: Suicide Rates by Age Group and Gender, Status Indian, 1991-1998



Source: BC Vital Statistics Agency, Ministry of Health, Unpublished tables.

- *Young women have a higher risk of attempted suicide than young men.* Female youth are at higher risk of considering, planning, and attempting suicide compared to their male counterparts. This reflects the gender difference around emotional distress, with older teen girls experiencing the highest incidence.

- *Youth on the street are at highest risk of attempted suicide.* Both female and male youth who are on the street are more likely than other youth to consider, plan, or attempt suicide.